MELODIC

Mental Health Support for Young Adults with Cancer

Project Number: 101161023

WP3: Co-design guide and training to decrease health inequalities

Deliverable 3.2: Training programme evaluation report

Authors		J Oliveira Lopes, M Portugal, M Tomás	
Version		V1.0	
Due Date		30.06.2026	
Work Package		WP 3	
Deliverable		D 3.2	
Dissemination level		PU	
WP Leaders		Turku UAS	
Delivered		30.06.2026	
Version	Date	Comments	Modified by
V1.1	30.06.2026	The deliverable updated according to the comments from THCC	J Oliveira Lopes

Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the Health and Digital Executive Agency (HaDEA). Neither the European Union nor the granting authority can be held responsible for them.

Executive Summary

This deliverable reports the evaluation of the MELODIC online training programme "Mental Health Support for Young Adults with Cancer", implemented as part of Work Package 3.
The programme was delivered online through Moodle and comprised four thematic modules and a final international symposium. Across the five countries, 108 participants were enrolled and 83 completed the course. The evaluation used two questionnaires. Questionnaire A assessed the general programme experience, satisfaction, feasibility and open-ended feedback. Questionnaire B was administered before and after training to assess theoretical knowledge and self-reported attitudes, skills and readiness. The pre-training Questionnaire B included 131 respondents, while the post-training Questionnaire B and Questionnaire A each included 74 respondents. As responses could not be paired, results were analysed descriptively and should not be interpreted as individual change scores.
Overall, the programme was positively evaluated. Participants considered it relevant, useful and applicable to their work with young adults with cancer and their families. Learning materials, online access, practical examples and facilitator knowledge were well assessed, with qualitative feedback showing that participants valued the programme for increasing psychosocial awareness, supporting reflection, providing practical resources, and promoting interprofessional and international exchange. The theoretical knowledge results showed high percentages of correct responses in most domains before and after the programme, with slightly higher post-training percentages across all four domains. Interprofessional practice and personal well-being showed the lowest correct-response percentages, indicating an area for further reinforcement. Attitudes, skills and readiness data also suggested a descriptive increase in reported practices after training, particularly interprofessional collaboration, psychosocial support, care pathways, green/blue spaces and social prescribing-inspired activities.
In conclusion, the MELODIC training programme was feasible, well received and professionally meaningful. Future editions should maintain the overall course structure while strengthening practical application, case-based learning, use of screening and assessment tools, interprofessional practice, language accessibility and synchronous session design. Future evaluation should consider paired pre-post evaluation designs, longer-term follow-up and complementary qualitative or practice-based data.

Table of Contents

1. MELODIC project and WP3 training programme

MELODIC (Mental Health Support for Young Adults with Cancer) aims to promote the mental health and well-being of young adults with cancer and their family members/caregivers by improving screening, early detection and person-centred management of mental health needs during the first year after cancer diagnosis. WP3 focuses on the co-design, implementation and evaluation of a training programme for healthcare professionals working in cancer care and/or mental health and psychosocial support services.

The training programme was delivered online through Moodle and was designed as a competence-based continuing education course. It included four modules and a final international symposium. The curriculum was guided by EQF level 7 principles and comprised a workload of approximately 125 hours / 5 ECTS. The course ran from 2 March to 24 April 2026 and combined self-paced online materials, contact sessions for case discussion and group work, and an international symposium to support networking across participants and countries. Each module lasted two weeks and included theoretical content, patient case studies, independent assignments, quizzes/tests and supportive learning materials. At the end of each module, participants attended a 2-hour facilitator-guided contact session, during which the module topics were discussed and applied through case discussion and group work. Participants were encouraged to complete the module assignments before each contact session to support active participation and consolidation of learning. The final symposium synthesised the programme content and promoted exchange across participants and countries. The overall structure of the MELODIC training programme is presented in Table 1.

Module	Theme
1	Cancer diagnosis and emotional distress
2	Mental health impact of a cancer diagnosis on family members
3	Interventions to support mental health
4	The key to high quality psychosocial care: interprofessional practice and personal well-being
Final activity	MELODIC International symposium

Table 1. Overview of the MELODIC training programme structure.

To complete the course, participants were required to complete 70% of the tests/quizzes in each module, complete the assignments related to Modules 1–4, and participate in the required learning activities. Participants were allowed to miss one contact session. Those who successfully completed the required activities were awarded with a certificate at the end of the course.

2. Evaluation design and instruments

The evaluation followed the MELODIC WP3 training programme evaluation protocol (Appendix 1). The evaluation followed the MELODIC WP3 training programme evaluation protocol (Appendix I). Two questionnaires were used (see Table 2):

- Questionnaire A was administered after programme completion and focused on the learning experience, satisfaction with learning, programme length, presentation speed and open-ended feedback.
- Questionnaire B was used before and after training to describe theoretical knowledge, attitudes, skills and readiness concerning the mental health needs of young adults with cancer and their family members/caregivers. Additionaly, the Questionnaire B – Pre-training Programme Evaluation administered before the course started included socio-professional characterisation.

Instrument	Timing	Main dimensions
Questionnaire B – pre-training evaluation	Before course start	Socio-professional profile; theoretical knowledge; attitudes, skills and readiness
Questionnaire A – programme general evaluation	After programme completion	Experience of learning; satisfaction with learning; programme length and presentation speed; open feedback
Questionnaire B – post-training evaluation	After programme completion	Theoretical knowledge; attitudes, skills and readiness

Table 2. Evaluation instruments and timing

The pre-training Questionnaire B was sent to participants on 26 February 2026. The course started on 2 March 2026 and ended on 24 April 2026. Questionnaire A and the post-training Questionnaire B were distributed after the course and final international symposium, on 25 May 2026. Responses to the post-training questionnaires were collected until 9 June 2026.

3. Data handling and analysis

Results were obtained via MS Forms®, which generated an Excel file for each questionnaire. Both questionnaires were developed in English and translated by each partner into the language of their respective country. The structure and numbering of the questionnaires were maintained across language versions to support integrated analysis. The questionnaires were converted into MS Forms® by ESEULisboa and hosted on ESEULisboa servers. Access links were distributed to a designated member of each partner organisation, and participants completed the questionnaires in their national language.

Data were collected from Estonia, Finland, Greece, Ireland and Portugal. The Netherlands implemented the course but provided no questionnaire responses in the supplied evaluation datasets and was therefore excluded from the questionnaire result tables. Greek participation figures were retained as provided and should be interpreted with caution.

Data analysis was descriptive and based on valid responses per item. For Questionnaire A, Likert-scale items are reported as frequencies and percentages by response category. For Questionnaire B, theoretical knowledge was assessed by matching participant responses to the correct answers specified in the evaluation protocol, as response order in the forms was randomised. Items using a 1–10 numeric scale are summarised using means, minimum–maximum values and frequency distributions. Open-ended responses were translated into English where necessary, anonymised and analysed using content analysis.

4. Participation and questionnaire response

Across the countries with available participation records, 108 participants were enrolled and 83 completed the course (Table 3).

Country	Enrolled	Contact 1	Contact 2	Contact 3	Contact 4	Symposium	Completed	Drop-out
Estonia	18	16	14	15	14	16	17	1
Finland	17	15	13	12	10	11	13	2
Greece	11	22	22	17	18	13	10	1
Ireland	41	26	24	24	18	13	25	16
Portugal	21	18	17	18	17	12	18	3
Netherlands	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Total (available data)	108	97	90	86	77	65	83	23

Table 3. Participation numbers by country.

Completion was particularly high in Estonia, Portugal and Finland, while Ireland had the largest number of enrolled participants and the highest number of drop-outs. The Greek participation figures were retained as provided because final participation numbers were not submitted; however, these data should be interpreted with caution, as some attendance values exceed the number of enrolled participants.

Attendance across the contact lessons decreased over time, from 97 participants in Contact Lesson 1 to 77 in Contact Lesson 4. This pattern was especially visible in Ireland and Finland, whereas Estonia and Portugal maintained relatively stable attendance across the sessions. Attendance at the final symposium by the course participants was lower, with 65 participants recorded overall. These results suggest that, although the programme achieved substantial completion, maintaining engagement across synchronous activities may require additional strategies in future editions, such as reminders, flexible scheduling, recordings or complementary asynchronous activities. The final symposium had in total 110 participants, showing the topic interest to other health and social care professionals from all countries involved.

The pre-training Questionnaire B included 131 respondents, while the post-training Questionnaire B and Questionnaire A each included 74 respondents (Table 4).

Country	Pre-training Questionnaire B	Post-training Questionnaire B	Questionnaire A
Estonia	20	16	16
Finland	19	10	10
Greece	28	15	15
Ireland	41	19	19
Portugal	23	14	14
Total	131	74	74

Table 4. Number of respondents by questionnaire and country.

The number of respondents decreased from the pre-training to the post-training. While 131 participants completed the pre-training Questionnaire B, 74 participants completed the post-

training Questionnaire B and Questionnaire A (see Figure 1). This reduction is consistent with the participation pattern observed across the course, where engagement decreased over time. Ireland contributed the largest number of responses at both time points, followed by Greece and Portugal in the pre-training questionnaire, and Estonia, Greece and Portugal in the post-training evaluation.

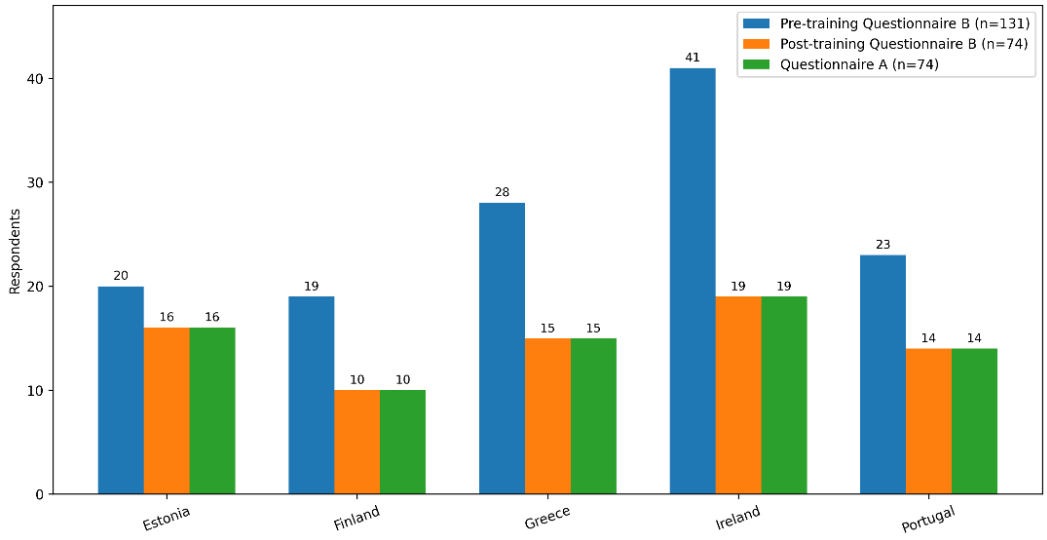

Figure 1. Questionnaire respondents by country.

5. Participant profile

The pre-training Questionnaire B respondents represented a multidisciplinary sample of health and social care professionals from the five countries with questionnaire responses. Overall, 131 respondents completed the pre-training questionnaire. Among those with valid age data, the mean age was 40.2 years, ranging from 21 to 59 years. The mean number of years of working experience with young adults with cancer was 10.2 years, with a range from 0 to 30 years (see Table 5). This indicates that the course reached professionals at different career stages and with varying degrees of prior exposure to this population. Age data for Ireland could not be included, as the corresponding field was inadvertently deleted during data collection.

Country	Total respondents	Age valid n	Age mean (years)	Age min–max	Experience valid n	Experience mean (years)	Experience min–max
Overall	131	89	40.2	21–59	121	10.2	0–30
Estonia	20	19	44.1	21–57	19	6.5	0–30
Finland	19	19	40.2	28–53	19	7.7	0–20
Greece	28	28	38.8	23–59	21	7.3	0–25
Ireland	41	0	n/a	n/a	40	13.1	0–30
Portugal	23	23	38.7	23–54	22	12.9	0.5–30

Table 5. Age and experience profile of pre-training Questionnaire B respondents.

The sample was predominantly female across all countries, with 121 female respondents (92.4%) and 10 male respondents (7.6%) (see Table 6).

Country	Valid n	Female	Male	Non-binary	Prefer not to say
Overall	131	121 (92.4%)	10 (7.6%)	0 (0.0%)	0 (0.0%)
Estonia	20	20 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Finland	19	19 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Greece	28	25 (89.3%)	3 (10.7%)	0 (0.0%)	0 (0.0%)
Ireland	41	38 (92.7%)	3 (7.3%)	0 (0.0%)	0 (0.0%)
Portugal	23	19 (82.6%)	4 (17.4%)	0 (0.0%)	0 (0.0%)

Table 6. Gender by country, n (%)

Nursing was the most frequent professional group overall, accounting for 76 respondents (58.0%). This was particularly evident in Finland and Ireland, while Portugal and Greece showed more diverse professional profiles, including medical doctors, psychologists, social workers, health visitors/community health scientists and other professionals (see Table 7).

Country	Valid n	Nurse	Medical doctor	Health Visitor / Community Health Scientist	Psychologist	Social worker	Other
Overall	131	76 (58.0%)	10 (7.6%)	9 (6.9%)	8 (6.1%)	6 (4.6%)	22 (16.8%)
Estonia	20	10 (50.0%)	0 (0.0%)	0 (0.0%)	2 (10.0%)	1 (5.0%)	7 (35.0%)
Finland	19	15 (78.9%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	4 (21.1%)
Greece	28	9 (32.1%)	1 (3.6%)	9 (32.1%)	4 (14.3%)	2 (7.1%)	3 (10.7%)
Ireland	41	31 (75.6%)	1 (2.4%)	0 (0.0%)	0 (0.0%)	3 (7.3%)	6 (14.6%)
Portugal	23	11 (47.8%)	8 (34.8%)	0 (0.0%)	2 (8.7%)	0 (0.0%)	2 (8.7%)

Table 7. Profession by country, n (%).

The most frequent work settings were hospital inpatient oncology units and day hospital or ambulatory oncology services. Mental health and psychosocial support services and other cancer-related or community settings were also represented. Country-level patterns varied, with Finland and Portugal mainly represented by hospital inpatient oncology units, Estonia and Ireland by day hospital or ambulatory oncology services, and Greece by a more distributed profile across services (see Table 8).

Country	Most frequent work settings
Overall	Hospital inpatient oncology unit: 46 (35.1%); Day hospital / Ambulatory oncology services: 33 (25.2%); Mental health and psychosocial support services: 15 (11.5%); Other: 15 (11.5%)
Estonia	Day hospital / Ambulatory oncology services: 7 (35.0%); Hospital inpatient oncology unit: 4 (20.0%); Mental health and psychosocial support services: 3 (15.0%); Primary health care / Community health services: 3 (15.0%)
Finland	Hospital inpatient oncology unit: 14 (73.7%); Rehabilitation services: 2 (10.5%); Other: 2 (10.5%); Palliative care services: 1 (5.3%)
Greece	Mental health and psychosocial support services: 7 (25.0%); Hospital inpatient oncology unit: 6 (21.4%); Primary health care / Community health services: 5 (17.9%); Day hospital / Ambulatory oncology services: 4 (14.3%)
Ireland	Day hospital / Ambulatory oncology services: 17 (41.5%); Other: 8 (19.5%); Hospital inpatient oncology unit: 7 (17.1%); Mental health and psychosocial support services: 4 (9.8%)
Portugal	Hospital inpatient oncology unit: 15 (65.2%); Day hospital / Ambulatory oncology services: 5 (21.7%); Other: 2 (8.7%); Mental health and psychosocial support services: 1 (4.3%)

Table 8. Most frequent work settings by country.

Overall, the participant profile suggests that the MELODIC training programme primarily reached female nursing professionals working in oncology-related settings, while also engaging other relevant professional groups and care context.

6. Questionnaire A: Programme general evaluation

Questionnaire A was an anonymous self-completed questionnaire used to evaluate participants' satisfaction, general feedback and perceived feasibility of the MELODIC training programme. It was administered after completion of the training programme and final international symposium, from 24 May to 9 June 2026.

The questionnaire included two main sections: experience of learning and satisfaction with learning. Most questions were closed-ended and used a five-point Likert scale, ranging from Strongly disagree to Strongly agree. The questionnaire also included two open-ended questions asking participants to identify aspects of the programme that had been beneficial to their learning and areas where the programme could be improved for future learners.

The results of Questionnaire A are presented in two subchapters. The first presents the quantitative findings from the closed-ended questions, while the second presents the qualitative analysis of the open-ended responses. Results are presented in aggregate form to provide an overall evaluation of the programme experience across participating contexts.

6.1 Quantitative data

In Section 1, Experience of learning, most respondents selected either "Agree" or "Strongly agree" across almost all items, suggesting that participants perceived the programme as clear, relevant, useful and well organised (Table 9). The purpose of the programme was clear before attendance for 97.2% of respondents, and 91.9% considered the programme a worthwhile use of their time. In addition, 91.9% agreed or strongly agreed that the programme helped them in their work with young adults with cancer and their families, while 87.8% stated that they would recommend the programme to co-workers. These findings indicate broad acceptance of the programme and suggest that participants perceived it as professionally relevant and applicable to practice. Learning materials were also positively evaluated. Most respondents agreed or strongly agreed that they were interesting (95.9%), engaging (93.2%), clear and organised (95.9%), and trustworthy/up-to-date (100.0%). Online access was assessed positively in terms of both usefulness (98.6%) and ease of access (97.3%). Practical examples supported learning for 93.1% of respondents, and 91.9% agreed or strongly agreed that facilitators were knowledgeable. These findings suggest that the online format, resources and pedagogical approach were appropriate for the target group.

Some items showed more moderate responses. Translated materials and subtitles were positively evaluated overall, with 79.7% agreeing or strongly agreeing that they were clear

and easy to understand, although 16.2% selected "Uncertain". The final symposium was also positively assessed, with 66.2% agreeing or strongly agreeing that it enriched their professional network, while 27.0% selected "Uncertain". This suggests that the symposium supported networking for many participants, but its value may not have been experienced equally by all.

Section 1 - Experience of learning						
Item	**Valid n**	**Strongly disagree**	**Disagree**	**Uncertain**	**Agree**	**Strongly agree**
Purpose clear before attending	74	0 (0.0%)	2 (2.7%)	0 (0.0%)	36 (48.6%)	36 (48.6%)
Met expectations for learning	74	1 (1.4%)	2 (2.7%)	6 (8.1%)	29 (39.2%)	36 (48.6%)
Worthwhile use of time	74	0 (0.0%)	4 (5.4%)	2 (2.7%)	27 (36.5%)	41 (55.4%)
Helped work with YAC and families	74	0 (0.0%)	2 (2.7%)	4 (5.4%)	22 (29.7%)	46 (62.2%)
Would recommend to co-workers	74	1 (1.4%)	2 (2.7%)	6 (8.1%)	20 (27.0%)	45 (60.8%)
Learning materials interesting	74	0 (0.0%)	0 (0.0%)	3 (4.1%)	26 (35.1%)	45 (60.8%)
Learning materials engaging	74	0 (0.0%)	0 (0.0%)	5 (6.8%)	30 (40.5%)	39 (52.7%)
Learning materials trustworthy/up-to-date	73	0 (0.0%)	0 (0.0%)	0 (0.0%)	32 (43.8%)	41 (56.2%)
Language easy to understand	74	0 (0.0%)	3 (4.1%)	3 (4.1%)	31 (41.9%)	37 (50.0%)
Online access useful	74	0 (0.0%)	0 (0.0%)	1 (1.4%)	26 (35.1%)	47 (63.5%)
Online access easy	74	0 (0.0%)	0 (0.0%)	2 (2.7%)	29 (39.2%)	43 (58.1%)
Practical examples supported learning	73	0 (0.0%)	2 (2.7%)	3 (4.1%)	25 (34.2%)	43 (58.9%)
Facilitators knowledgeable	74	0 (0.0%)	4 (5.4%)	2 (2.7%)	24 (32.4%)	44 (59.5%)
Materials clear and organised	74	0 (0.0%)	1 (1.4%)	2 (2.7%)	35 (47.3%)	36 (48.6%)
Translated materials/subtitles clear	74	0 (0.0%)	3 (4.1%)	12 (16.2%)	30 (40.5%)	29 (39.2%)
Symposium enriched professional network	74	2 (2.7%)	2 (2.7%)	20 (27.0%)	23 (31.1%)	26 (35.1%)

Table 9. Questionnaire A - Experience of learning: overall response frequencies

The results regarding programme length and presentation/video speed reveal most respondents considered the length of the programme to be "Just right" (82.4%; n = 61), while 13.5% (n = 10) considered it too short and only 4.1% (n = 3) considered it too long (see Figure 2). The presentation/video speed was evaluated even more positively, with 93.2% (n = 69) considering it "Just right"; only 4.1% (n = 3) considered it too slow and 2.7% (n = 2) too fast long (see Figure 2). Taken together, these findings support the feasibility and acceptability of the programme structure and pacing.

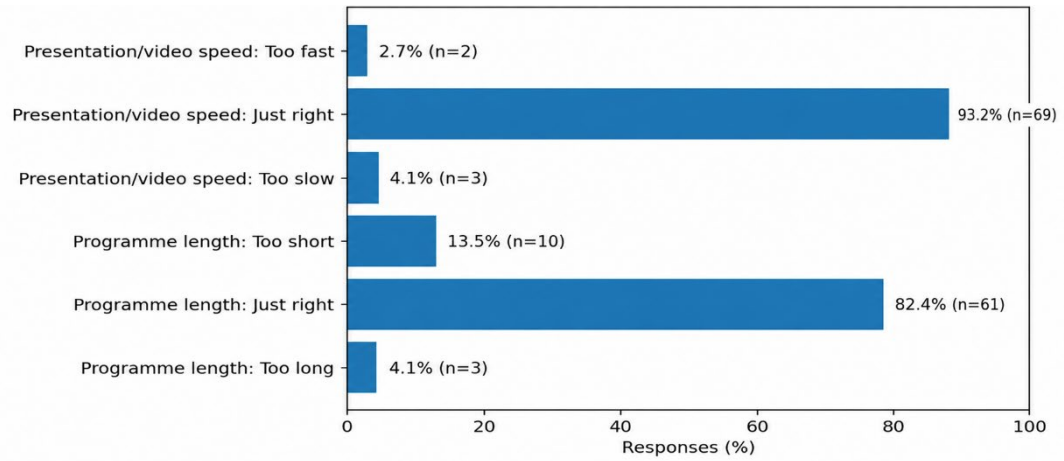

Figure 2. Perceived presentation/video speed and programme length: overall response frequencies.

In Section 2, Satisfaction with learning (see Table 10), most respondents agreed or strongly agreed that the programme met their educational and learning needs (86.5%) and increased their knowledge of the mental health needs of young adults with cancer and their family members/caregivers (95.9%; n = 73). The programme was also perceived as contributing to increased knowledge of cancer diagnosis and emotional distress (95.9%), the mental health impact of cancer diagnosis on family members (95.9%), screening methods (94.6%) and psychosocial support strategies (90.5%). Participants also evaluated positively the more practice-oriented components of the programme. A high proportion agreed or strongly agreed that the programme improved their ability to recommend green and/or blue spaces (89.2%) and social prescribing-inspired activities (91.8%; n = 73) to support the mental health of young adults with cancer. Similarly, 94.6% reported increased knowledge of the benefits of interprofessional collaboration and increased openness towards interprofessional care.

Section 2 – Satisfaction with learning						
Item	**Valid n**	**Strongly disagree**	**Disagree**	**Uncertain**	**Agree**	**Strongly agree**
Met educational and learning needs	74	0 (0.0%)	2 (2.7%)	8 (10.8%)	26 (35.1%)	38 (51.4%)
Increased knowledge of YAC/family mental health needs	73	0 (0.0%)	1 (1.4%)	2 (2.7%)	25 (34.2%)	45 (61.6%)
Increased knowledge of diagnosis and emotional distress	74	0 (0.0%)	1 (1.4%)	2 (2.7%)	27 (36.5%)	44 (59.5%)
Increased knowledge of family mental health impact	74	0 (0.0%)	1 (1.4%)	2 (2.7%)	27 (36.5%)	44 (59.5%)
Increased knowledge of screening methods	74	0 (0.0%)	1 (1.4%)	3 (4.1%)	27 (36.5%)	43 (58.1%)
Increased knowledge of psychosocial support strategies	74	0 (0.0%)	1 (1.4%)	6 (8.1%)	31 (41.9%)	36 (48.6%)

Section 2 – Satisfaction with learning						
Item	**Valid n**	**Strongly disagree**	**Disagree**	**Uncertain**	**Agree**	**Strongly agree**
Improved ability to recommend green/blue spaces	74	0 (0.0%)	1 (1.4%)	7 (9.5%)	22 (29.7%)	44 (59.5%)
Improved ability to recommend social prescribing activities	73	0 (0.0%)	1 (1.4%)	5 (6.8%)	27 (37.0%)	40 (54.8%)
Increased knowledge of interprofessional collaboration	74	0 (0.0%)	2 (2.7%)	2 (2.7%)	26 (35.1%)	44 (59.5%)
Increased openness to interprofessional care	74	0 (0.0%)	2 (2.7%)	2 (2.7%)	26 (35.1%)	44 (59.5%)

Table 10. Questionnaire A - Satisfaction with learning: overall response frequencies

These findings suggest that participants perceived the programme as useful not only for increasing knowledge, but also for strengthening readiness to provide holistic, person-centred and collaborative mental health support in cancer care.

6.2 Qualitative data

Questionnaire A to further understand participants' evaluation of the programme. The first asked participants to identify aspects of the programme that had been beneficial to learning, while the second asked them to identify areas where the programme could be improved for future learners. Responses were edited minimally for readability, including punctuation, obvious typographical errors and British English spelling, while preserving the original meaning and context. The complete set of responses is provided in Appendix II.

Reflexive content analysis[1] was conducted using a descriptive and iterative approach focused on manifest meanings in participants' written feedback. Responses were read repeatedly, coded line by line, and organised into subcategories and broader categories. In total, 245 codes were identified. The value n refers to codes, not to participants. The full coding structure is presented in Appendix III.

The analysis generated seven main categories: understanding the psychosocial impact of cancer on young adults and families; clinical usefulness and application to practice; interprofessional, peer and international learning; learning design, flexibility and pedagogical resources; areas for strengthening pedagogical and practical delivery; accessibility, language and technical improvements; and future format and implementation considerations (Table 11).

Category	Subcategories	Manifest meaning in the data	Illustrative codes
Understanding the psychosocial impact of cancer	Emotional and mental health impact of cancer on young	Participants described gaining a deeper understanding of how cancer affects young	"I gained a much better understanding of how cancer affects so many

[1] Nicmanis, M. (2024). Reflexive content analysis: An approach to qualitative data analysis, reduction, and description. International Journal of Qualitative Methods, 23, 1–12. https://doi.org/10.1177/16094069241236603

Category	Subcategories	Manifest meaning in the data	Illustrative codes
on young adults and families (n = 39)	adults; family, caregiver and relational needs; holistic and person-centred understanding of care; increased awareness, reflection and confidence in approaching young adults with cancer	adults emotionally, socially and developmentally, as well as recognising the importance of supporting families and adopting a holistic approach to care.	different aspects of a young person's life." (Estonia); "Greater understanding of the psychological impact of cancer on young adults; I learned practical strategies for emotional support." (Portugal)
Clinical usefulness and application to practice (n = 45)	Screening, assessment tools and indicators; communication strategies and therapeutic interaction; practical support strategies, referral options and resources; social prescribing, green/blue spaces and self-care resources; translation of learning into daily clinical practice	Participants valued tools and strategies that could be applied in practice, including screening instruments, communication approaches, referral options, social prescribing-inspired activities and strategies for supporting patients, families and professionals.	"Clinical screening tools, the family and caregiver dynamic, interprofessional collaboration and professional well-being." (Ireland); "Indicators: identification and screening of mental health challenges; these are still little utilized in the care of cancer patients and enable the provision of early support." (Finland)
Interprofessional, peer and international learning (n = 33)	Multidisciplinary exchange and collaboration; learning from peers, facilitators and lived/professional experience; international perspectives, comparison between countries and networking	Participants valued learning with and from professionals from different disciplines, services and countries, as this broadened their understanding of resources, practices and care realities.	"Hearing opinions from different disciplines was helpful." (Ireland); "It was interesting to see how they work in other countries." (Greece)
Learning design, flexibility and pedagogical resources (n = 45)	Online flexibility and self-paced learning; availability and possibility of revisiting learning materials; combination of asynchronous learning and synchronous contact sessions; usefulness of videos, case studies and practical examples	The online and multimodal structure was frequently identified as beneficial. Participants appreciated self-paced learning, recorded resources, access to materials, contact lessons, videos and clinical case examples.	"The online part gave flexibility, while the reflection meetings helped deepen my understanding by discussing experiences and learning from others." (Ireland); "Possibility to complete the modules at a personally suitable pace and time. Possibility to rewatch the lectures. Possibility to use additional materials." (Estonia)
Areas for strengthening	Need for more practical examples,	Suggested improvements focused on making the	"More practical examples and case-

Category	Subcategories	Manifest meaning in the data	Illustrative codes
pedagogical and practical delivery (n = 35)	exercises and concrete operating models; clearer instructions, facilitation and organisation of group work; more time for discussion, case analysis and reflection; repetition, density or clarity of content	programme even more practical, clearer and easier to apply. Participants asked for more concrete exercises, clearer group tasks, stronger facilitation and more time for discussion and reflection.	based discussions would help to better relate theory to real clinical situations." (Estonia); "More time for synchronous classes for discussion and analysis of case studies." (Portugal)
Accessibility, language and technical improvements (n = 22)	Translation quality and access to national-language materials; subtitle and language clarity; technical/platform issues and access to materials in downloadable formats	Participants identified language accessibility and technical issues as relevant areas for improvement, particularly regarding translation, subtitles, terminology, Moodle/platform functioning and access to materials in formats that could be downloaded or printed.	"The translation of the learning materials was at times difficult to understand." (Estonia); "The language/terminology in parts of the presentations/questions could be simplified or restructured; sometimes it was difficult to interpret." (Ireland)
Future format and implementation considerations (n = 26)	Hybrid or in-person components; scheduling, timing and workload management; target group suitability and participant engagement	Participants reflected on the future implementation of the programme, including the possible value of hybrid or in-person components, earlier scheduling information, better alignment with workload demands and attention to participant engagement.	"This type of course works better when you attend in person, as you can then give it your full attention." (Ireland); "The online seminar days could have been communicated earlier so that the work schedule could have been better arranged around the seminar." (Estonia)

Table 11. Reflexive content analysis of open-ended responses from Questionnaire A

The qualitative findings reinforce the quantitative evaluation by showing that participants perceived the programme as relevant, useful and professionally meaningful. Participants valued the programme for increasing awareness of the psychosocial impact of cancer, broadening their understanding of family and caregiver needs, supporting reflection on communication and holistic care, and providing practical resources for clinical practice. Screening tools, communication strategies, referral options, social prescribing-inspired activities and self-care resources were frequently identified as useful for practice.

Interprofessional and international learning was another important dimension of the feedback. Participants valued discussion with professionals from different disciplines, services and countries, as well as opportunities to compare practices and learn from peers, facilitators and

lived or professional experience. The online and multimodal structure was also viewed positively, particularly the flexibility of self-paced learning, access to materials, recorded resources, contact sessions, videos and clinical case examples.

Suggestions for improvement focused mainly on making the programme more practical, accessible and interactive. Participants recommended more clinical case studies, practical exercises, clearer instructions for group work, stronger facilitation in breakout rooms and more time for discussion and reflection. Language accessibility was also identified as an area for improvement, especially regarding translated materials, subtitles, terminology and access to resources in national languages. Some participants also suggested downloadable formats for videos or slides, and several considered that hybrid or in-person components could strengthen engagement in interactive activities such as role play, case discussion and peer exchange.

Country-specific patterns were also observed. Estonian feedback emphasised increased awareness, flexibility, communication, interdisciplinary collaboration and the need for better translated materials. Finnish participants highlighted screening and assessment tools, multidisciplinary collaboration and peer discussion, while requesting clearer tasks and more practical working methods. Greek responses emphasised knowledge enrichment, case studies, social prescribing and awareness of support structures, alongside requests for improved subtitles, more Greek-language resources and longer discussion time. Irish participants valued clinical tools, lived experience and multidisciplinary exchange, but raised concerns about online engagement and repetitive group discussions. Portuguese participants valued multidisciplinary exchange, practical examples, flexibility, communication skills and reflection, while suggesting more time for clinical cases, downloadable materials, better translation and attention to Moodle-related issues.

Overall, the open-ended responses indicate that the programme was experienced as beneficial through increased psychosocial awareness, practical applicability, interprofessional exchange, flexible learning and reflection on practice. At the same time, the improvement suggestions provide clear guidance for future editions, particularly regarding practical application, language accessibility, synchronous session design, technical reliability and possible hybrid or in-person learning opportunities.

7. Questionnaire B: Pre and post training programme evaluation questionnaire

The Pre- and Post-training Programme Evaluation Questionnaire (Questionnaire B) was used to assess participants' theoretical knowledge, attitudes, skills and readiness concerning the mental health needs of young adults with cancer and their family members/caregivers. The questionnaire allowed comparison of pre- and post-training datasets using the same core questions at both time points. The pre-training questionnaire was sent to participants on 26 February 2026, before the course started on 2 March 2026. The post-training questionnaire was administered after completion of the programme and final international symposium, from 25 May to 9 June 2026. Questionnaire B included two main analytical sections:

- Section 2 - Theoretical knowledge concerning young adults with cancer mental health needs comprised 22 closed-ended questions. These questions assessed learning related to the main topics of the MELODIC training programme: cancer diagnosis and emotional distress; mental health impact of cancer diagnosis on family members; interventions to support mental health; and interprofessional practice and personal well-being. Each question included four response options, with only one correct answer.
- Section 3 - Attitudes, skills and readiness concerning young adults with cancer mental health needs comprised 11 questions. This section assessed participants' perceived readiness and skills to address the mental health needs of people affected by cancer, as well as their intention to change practice. The questions referred to participants' professional practice with young adults with cancer during the previous 30 days.

The post-training version of Questionnaire B was identical to the pre-training version, except for the exclusion of the socio-professional characterisation section, which was collected only before the course. As the pre- and post-training responses could not be paired, the two datasets were treated as independent samples and analysed descriptively.

The results of Questionnaire B are presented in the following subchapters. The first subchapter presents the results concerning theoretical knowledge, focusing on participants' responses to the knowledge-based items before and after the training programme. The second subchapter presents the results concerning attitudes, skills and readiness regarding young adults with cancer mental health needs, describing participants' self-reported preparedness, confidence and perceived ability to address these needs in clinical practice.

7.1 Questionnaire B: theoretical knowledge

The theoretical knowledge section of Questionnaire B included 22 multiple-choice questions organised into four domains: cancer diagnosis and emotional distress; mental health impact of cancer diagnosis on family members; interventions to support mental health; and interprofessional practice and personal well-being. Results are reported as the percentage of correct responses per item and domain. As the pre- and post-training samples were independent, the values should be interpreted descriptively rather than as paired change scores.

Overall, correct-response percentages were high in most domains at both time points (Figure 3 and Table 12). Before training, the highest overall correct-response percentage was observed in cancer diagnosis and emotional distress (89.1%), followed by interventions to support mental health (87.5%) and family mental health impact (82.6%). The lowest percentage was observed in interprofessional practice and personal well-being (60.2%). After training, the same pattern was observed, with correct-response percentages of 90.1%, 88.6%, 85.6% and 66.4%, respectively.

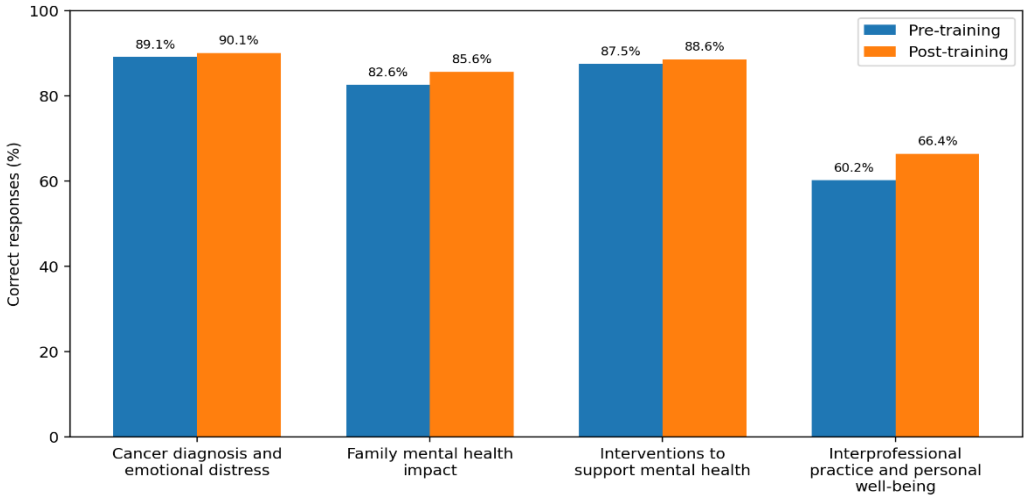

Figure 3. Theoretical knowledge: overall % of correct responses by domain, pre-post-training

Country	Cancer diagnosis and emotional distress		Family mental health impact		Interventions to support mental health		Interprofessional practice and personal well-being	
Timing	Pre-training	Post-training	Pre-training	Post-training	Pre-training	Post-training	Pre-training	Post-training
Overall	89.1%	90.1%	82.6%	85.6%	87.5%	88.6%	60.2%	66.4%
Estonia	90.0%	97.9%	84.9%	94.8%	90.8%	96.8%	60.8%	70.3%
Finland	88.6%	95.0%	80.5%	85.0%	85.3%	96.6%	39.4%	52.5%
Greece	82.7%	65.6%	79.8%	66.7%	86.3%	64.4%	62.0%	55.0%
Ireland	92.7%	98.2%	82.0%	85.1%	85.7%	91.1%	68.1%	75.0%
Portugal	89.9%	92.9%	87.0%	96.4%	91.3%	96.4%	59.3%	73.2%

Table 12. Theoretical knowledge: % of correct responses by domain, timing and country

Country-level results showed variation across domains and evaluation points. In the post-training dataset, Estonia, Ireland and Portugal showed high correct-response percentages in most domains, while Finland also showed high percentages in cancer diagnosis and emotional distress and interventions to support mental health. Greece presented lower post-training percentages across all four domains compared with the other countries. Given that the pre- and post-training samples were independent and respondent numbers varied between time points, these country-level differences should be interpreted with caution. They may reflect differences in respondent composition, professional background, local implementation conditions or engagement with the training activities.

At item level, most questions showed high correct-response percentages in both datasets (Table 13). Several items reached or exceeded 90% correct responses before training, suggesting strong baseline knowledge in some areas and a possible ceiling effect. Some items nevertheless showed lower percentages and may point to content requiring further attention. In interprofessional practice and personal well-being, item 2.4.4 had the lowest correct-response percentage at both time points, increasing only from 30.7% to 35.6%. Item 2.4.3 also remained comparatively low, with 59.4% correct responses before training and 64.4% after training. In the family mental health impact domain, items 2.2.4 and 2.2.5 showed higher correct-response percentages after training, increasing from 56.9% to 71.6% and from 60.8% to 74.3%, respectively.

Domain	Question code	Pre correct/valid (%)	Post correct/valid (%)
Cancer diagnosis and emotional distress	2.1.1	84.0%	93.2%
	2.1.2	94.7%	91.9%
	2.1.3	87.8%	89.2%
	2.1.4	97.7%	91.9%
	2.1.5	73.3%	81.1%
	2.1.6	96.9%	93.2%
Mental health impact of cancer diagnosis in family members	2.2.1	82.3%	86.5%
	2.2.2	100.0%	94.6%
	2.2.3	97.7%	91.9%

Domain	Question code	Pre correct/valid (%)	Post correct/valid (%)
	2.2.4	56.9%	71.6%
	2.2.5	60.8%	74.3%
	2.2.6	97.7%	94.6%
Interventions to support mental health	2.3.1	92.4%	93.2%
	2.3.2	99.2%	94.6%
	2.3.3	78.7%	78.1%
	2.3.4	80.9%	87.7%
	2.3.5	81.4%	87.8%
	2.3.6	92.4%	90.3%
Interprofessional practice and personal well-being	2.4.1	83.6%	86.3%
	2.4.2	66.7%	79.5%
	2.4.3	59.4%	64.4%
	2.4.4	30.7%	35.6%

Table 13. Theoretical knowledge: overall % of correct responses by item, organised by domain

Overall, the theoretical knowledge results suggest that participants demonstrated high levels of correct knowledge in most domains before and after the MELODIC training programme. The post-training dataset showed slightly higher overall percentages across all four domains, although findings should be interpreted descriptively due to the independent nature of the samples. The results also identify areas for future strengthening, particularly interprofessional practice and personal well-being and selected items related to family mental health impact.

7.2 Questionnaire B: attitudes, skills and readiness

The attitudes, skills and readiness section of Questionnaire B assessed participants' self-reported professional practices concerning the mental health needs of young adults with cancer during the previous 30 days. Six items used a 1–10 frequency scale, where higher values indicate more frequent practice. These items addressed assessment of mental health needs, interprofessional collaboration, engagement with care pathways and guidance to services, implementation of psychosocial support, and recommendations related to green/blue spaces and social prescribing-inspired activities.

The section also included questions on whether participants used assessment tools and whether they used objective and subjective data in interviews. Respondents who answered affirmatively were invited to specify the tools or data used. Participants were also asked to identify the types of social prescribing-inspired activities they had recommended. As the pre- and post-training samples were independent, results are interpreted descriptively rather than as paired change scores. Valid n varies by item because only valid responses were included in each calculation.

Overall mean frequency scores were higher in the post-training dataset across all six practice-related items (Figure 4). The largest descriptive increases were observed for recommending

green and/or blue spaces and social prescribing-inspired activities. Mean scores also increased for interprofessional collaboration, engagement with care pathways and guidance to services, implementation of psychosocial support, and assessment of mental health needs.

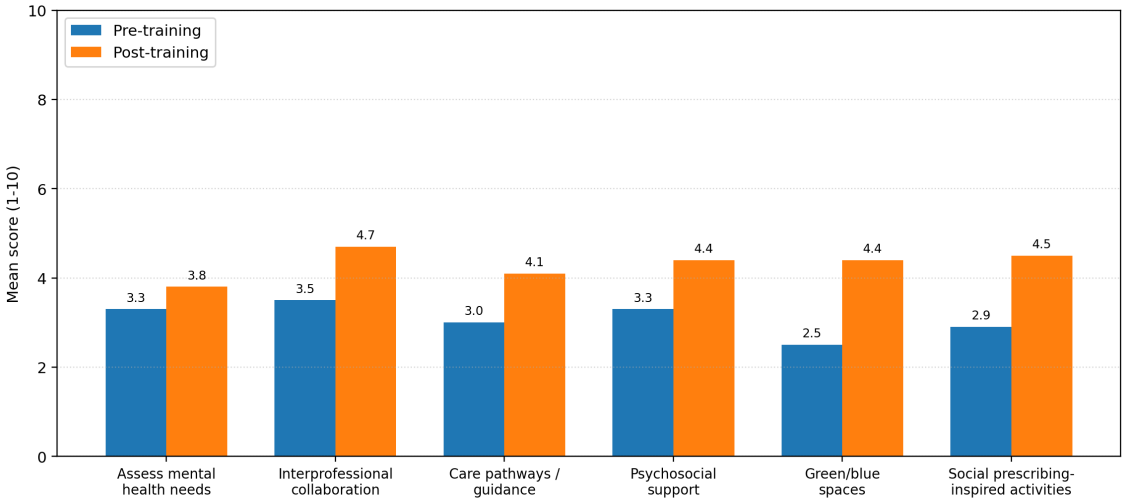

Figure 4. Attitudes, skills and readiness: mean frequency scores

These findings suggest that, after the programme, respondents reported more frequent use of practices aligned with mental health support, interprofessional care and social prescribing-inspired approaches.

Country-level results show variation in both baseline and post-training mean scores (Table 14). Ireland and Portugal showed higher post-training means across several items, particularly interprofessional collaboration, implementation of psychosocial support and recommendations related to green/blue spaces or social prescribing-inspired activities. Estonia generally reported lower post-training means, which may reflect differences in respondent profile, clinical roles or opportunities to work with young adults with cancer during the 30 days before completing the questionnaire. These country-level patterns should be interpreted with caution due to the independent samples and the small number of post-training respondents in each country.

Country	Item	Pre-training			Post-training		
		Valid n	Mean	Min–max	Valid n	Mean	Min–max
Overall	3.1 Assessed YACs' mental health needs	129	3.3	1-10	73	3.8	1-10
	3.4 Sought interprofessional collaboration	89	3.5	1-10	57	4.7	1-10
	3.5 Engaged with care pathways/provided guidance	92	3.0	1-10	57	4.1	1-10
	3.6 Implemented psychosocial support	92	3.3	1-10	57	4.4	1-10

Country	Item	Pre-training			Post-training		
		Valid n	Mean	Min–max	Valid n	Mean	Min–max
	3.7 Recommended green/blue spaces	92	2.5	1-10	57	4.4	1-10
	3.8 Recommended other social prescribing-inspired activities	93	2.9	1-10	55	4.5	1-10
Estonia	3.1 Assessed YACs' mental health needs	20	2.2	1-10	16	2.1	1-7
	3.4 Sought interprofessional collaboration	13	1.8	1-5	13	2.5	1-7
	3.5 Engaged with care pathways/provided guidance	13	2.1	1-5	13	2.2	1-7
	3.6 Implemented psychosocial support	12	2.6	1-7	13	1.9	1-6
	3.7 Recommended green/blue spaces	13	1.8	1-10	13	2.0	1-6
	3.8 Recommended other social prescribing-inspired activities	13	2.8	1-10	12	2.4	1-6
Finland	3.1 Assessed YACs' mental health needs	19	3.3	1-10	10	3.6	1-10
	3.4 Sought interprofessional collaboration	12	3.8	1-10	8	4.1	1-10
	3.5 Engaged with care pathways/provided guidance	12	3.0	1-9	8	3.5	1-10
	3.6 Implemented psychosocial support	12	5.2	1-10	8	4.2	1-10
	3.7 Recommended green/blue spaces	12	2.7	1-10	8	4.1	1-10
	3.8 Recommended other social prescribing-inspired activities	12	2.9	1-10	8	3.5	1-7
Greece	3.1 Assessed YACs' mental health needs	28	2.8	1-9	15	3.1	1-10
	3.4 Sought interprofessional collaboration	14	3.9	1-8	9	4.7	2-8
	3.5 Engaged with care pathways/provided guidance	16	3.7	1-9	9	4.7	2-9
	3.6 Implemented psychosocial support	17	3.6	1-9	9	4.9	2-10
	3.7 Recommended green/blue spaces	17	3.6	1-10	9	4.8	2-10
	3.8 Recommended other social prescribing-inspired activities	17	2.9	1-8	8	4.9	2-10
Ireland	3.1 Assessed YACs' mental health needs	39	3.5	1-9	18	5.4	1-10
	3.4 Sought interprofessional collaboration	30	2.5	1-5	18	5.3	1-9
	3.5 Engaged with care pathways/provided guidance	31	3.7	1-10	18	5.3	1-10
	3.6 Implemented psychosocial support	31	2.5	1-5	18	5.3	1-9
	3.7 Recommended green/blue spaces	31	1.2	1-2	18	4.9	1-10
	3.8 Recommended other social prescribing-inspired activities	31	2.3	1-5	18	5.1	1-10
Portugal	3.1 Assessed YACs' mental health needs	23	4.6	1-8	14	4.8	1-9

Country	Item	Pre-training			Post-training		
		Valid n	Mean	Min–max	Valid n	Mean	Min–max
	3.4 Sought interprofessional collaboration	20	5.5	1-10	9	7.0	2-10
	3.5 Engaged with care pathways/provided guidance	20	2.2	1-5	9	4.7	1-8
	3.6 Implemented psychosocial support	20	3.8	1-9	9	6.0	1-9
	3.7 Recommended green/blue spaces	19	3.8	1-8	9	6.4	1-10
	3.8 Recommended other social prescribing-inspired activities	20	3.7	1-8	9	6.4	1-10

Table 14. Attitudes, skills and readiness: mean frequency scores by country, pre- and post-training

The use of assessment tools and objective/subjective data remained limited overall, but was more frequently reported in the post-training dataset (Table 15). The proportion of respondents reporting use of assessment tools increased from 8.2% before training to 23.3% after training. The reported use of objective and subjective data also increased, from 16.0% to 29.8%.

Country	Item	Pre-training			Post-training		
		Valid n	Yes n (%)	No n (%)	Valid n	Yes n (%)	No n (%)
Overall	3.2 Use of assessment tools	98	8 (8.2%)	90 (91.8%)	60	14 (23.3%)	46 (76.7%)
	3.3 Use of objective and subjective data	94	15 (16.0%)	79 (84.0%)	57	17 (29.8%)	40 (70.2%)
Estonia	3.2 Use of assessment tools	14	2 (14.3%)	12 (85.7%)	14	2 (14.3%)	12 (85.7%)
	3.3 Use of objective and subjective data	13	2 (15.4%)	11 (84.6%)	13	2 (15.4%)	11 (84.6%)
Finland	3.2 Use of assessment tools	13	0 (0.0%)	13 (100.0%)	8	0 (0.0%)	8 (100.0%)
	3.3 Use of objective and subjective data	12	1 (8.3%)	11 (91.7%)	8	2 (25.0%)	6 (75.0%)
Greece	3.2 Use of assessment tools	17	1 (5.9%)	16 (94.1%)	9	2 (22.2%)	7 (77.8%)
	3.3 Use of objective and subjective data	17	1 (5.9%)	16 (94.1%)	9	1 (11.1%)	8 (88.9%)
Ireland	3.2 Use of assessment tools	33	2 (6.1%)	31 (93.9%)	18	7 (38.9%)	11 (61.1%)
	3.3 Use of objective and subjective data	32	3 (9.4%)	29 (90.6%)	18	7 (38.9%)	11 (61.1%)
Portugal	3.2 Use of assessment tools	21	3 (14.3%)	18 (85.7%)	11	3 (27.3%)	8 (72.7%)
	3.3 Use of objective and subjective data	20	8 (40.0%)	12 (60.0%)	9	5 (55.6%)	4 (44.4%)

Table 15. Use of assessment tools and objective/subjective data by country, pre- and post-training

The open-ended responses linked to the use of assessment tools (3.2.1) and objective/subjective data (3.3.1) help to clarify how respondents understood and operationalised these practices. The proportion of respondents reporting use of assessment tools increased from 8.2% before training to 23.3% after training. The use of objective and

subjective data also increased from 16.0% to 29.8%. The content of the open responses suggests a shift from broader, heterogeneous examples before training towards more explicit references to distress screening, clinical interviewing, observation and structured assessment frameworks after training (Table 16).

Open response field	Pre-training content	Post-training content	Analysis
3.2.1 Assessment tools used	Pre-training: 8 specified responses. Respondents mentioned a heterogeneous set of tools, including the Distress Thermometer, PHQ-9, EEK-2, Problem Checklist, quality-of-life measures (EORTC QLQ-LC13, EQ5D5L, SF-36), cognitive or symptom measures (MMSE, ESAS), performance or palliative measures (ECOG, PPS), and nutritional/needs assessment tools (PG-SGA, Holistic Needs Assessment).	Post-training: 13 specified responses. The Distress Thermometer became the dominant example, often mentioned alone or with PHQ-9, PPS or the Caregiver Strain Index. One response was unclear ("DY").	Post-training responses were more concentrated around distress screening tools, particularly the Distress Thermometer. This may indicate greater alignment with the programme emphasis on screening and early detection of mental health needs. However, the limited number of affirmative responses and the presence of one unclear answer suggest that future editions should continue to reinforce when and how to select appropriate assessment tools.
3.3.1 Objective and subjective data used	Pre-training: 12 specified responses. Respondents described broad clinical and contextual data, including demographic information, education, marital status, symptoms, emotional state, treatment goals, sleep, appetite, school/work/home context, family perspectives, vital signs, physical examination, laboratory and imaging results, assessment scales, interviews and active listening.	Post-training: 14 specified responses. Respondents more often referred to interviews, observation, conversation, patient stories, clinical interview, scaling questions, self-report instruments, HEEADSSS assessment, the biopsychosocial model, support network, coping strategies, perceived support, direct questioning, and observable mental-state indicators such as crying, restlessness, lack of eye contact and changes in speech or mood.	Compared with pre-training, post-training responses gave more explicit attention to structured interviewing, observation, assessment frameworks and patient-reported information. This suggests a broader understanding of data sources for mental health assessment. Some responses still showed overlap or ambiguity between objective and subjective data, indicating that this distinction could be further clarified in future training activities.

Table 16. Content analysis of open-ended responses on assessment tools and objective/subjective data

Among respondents who identified social prescribing-inspired activities, physical activity was the most frequent activity in both datasets, increasing from 74.2% pre-training to 84.4% post-training (Table 17). Social support was also frequently identified, increasing from 56.5% to 66.7%. Nature-based activities increased from 43.5% to 48.9%, while education and spiritual activities also represented a higher proportion of post-training responses. Arts and culture, practical support and digital activities were less frequently identified after training. These results should be interpreted descriptively, as the denominator is limited to respondents who

provided at least one identifiable activity and multiple activities could be identified by the same respondent.

Country	Activity	Pre-training		Post-training	
		Valid n	n (%)	Valid n	n (%)
Overall	Physical activity	62	46 (74.2%)	45	38 (84.4%)
	Social support	62	35 (56.5%)	45	30 (66.7%)
	Arts and culture	62	31 (50.0%)	45	20 (44.4%)
	Practical support	62	25 (40.3%)	45	15 (33.3%)
	Nature-based	62	27 (43.5%)	45	22 (48.9%)
	Education	62	12 (19.4%)	45	14 (31.1%)
	Digital	62	14 (22.6%)	45	8 (17.8%)
	Spiritual	62	15 (24.2%)	45	14 (31.1%)
Estonia	Physical activity	11	8 (72.7%)	6	5 (83.3%)
	Social support	11	4 (36.4%)	6	6 (100.0%)
	Arts and culture	11	3 (27.3%)	6	4 (66.7%)
	Practical support	11	6 (54.5%)	6	4 (66.7%)
	Nature-based	11	8 (72.7%)	6	5 (83.3%)
	Education	11	2 (18.2%)	6	2 (33.3%)
	Digital	11	3 (27.3%)	6	2 (33.3%)
	Spiritual	11	5 (45.5%)	6	6 (100.0%)
Finland	Physical activity	7	6 (85.7%)	6	6 (100.0%)
	Social support	7	5 (71.4%)	6	4 (66.7%)
	Arts and culture	7	3 (42.9%)	6	2 (33.3%)
	Practical support	7	2 (28.6%)	6	2 (33.3%)
	Nature-based	7	2 (28.6%)	6	2 (33.3%)
	Education	7	3 (42.9%)	6	2 (33.3%)
	Digital	7	1 (14.3%)	6	0 (0.0%)
	Spiritual	7	1 (14.3%)	6	0 (0.0%)
Greece	Physical activity	13	9 (69.2%)	9	7 (77.8%)
	Social support	13	9 (69.2%)	9	2 (22.2%)
	Arts and culture	13	8 (61.5%)	9	3 (33.3%)
	Practical support	13	5 (38.5%)	9	2 (22.2%)
	Nature-based	13	7 (53.8%)	9	3 (33.3%)
	Education	13	0 (0.0%)	9	3 (33.3%)
	Digital	13	1 (7.7%)	9	2 (22.2%)
	Spiritual	13	2 (15.4%)	9	2 (22.2%)
Ireland	Physical activity	18	16 (88.9%)	16	13 (81.2%)
	Social support	18	13 (72.2%)	16	15 (93.8%)
	Arts and culture	18	9 (50.0%)	16	7 (43.8%)
	Practical support	18	11 (61.1%)	16	7 (43.8%)
	Nature-based	18	6 (33.3%)	16	7 (43.8%)
	Education	18	5 (27.8%)	16	5 (31.2%)
	Digital	18	3 (16.7%)	16	2 (12.5%)
	Spiritual	18	5 (27.8%)	16	4 (25.0%)
Portugal	Physical activity	13	7 (53.8%)	8	7 (87.5%)
	Social support	13	4 (30.8%)	8	3 (37.5%)
	Arts and culture	13	8 (61.5%)	8	4 (50.0%)
	Practical support	13	1 (7.7%)	8	0 (0.0%)
	Nature-based	13	4 (30.8%)	8	5 (62.5%)
	Education	13	2 (15.4%)	8	2 (25.0%)
	Digital	13	6 (46.2%)	8	2 (25.0%)
	Spiritual	13	2 (15.4%)	8	2 (25.0%)

Table 17. Social prescribing-inspired activities identified by respondents, by country, pre- and post-training

In summary, the attitudes, skills and readiness data indicate a descriptive increase in the reported frequency of several mental health support practices after the MELODIC training programme. The strongest pattern concerned social prescribing-inspired recommendations and interprofessional collaboration, followed by engagement with care pathways, psychosocial support and assessment of mental health needs. Although the use of assessment tools and objective/subjective data increased after training, these practices were still reported by a minority of respondents. The open-ended responses suggest that post-training respondents referred more consistently to distress screening tools, clinical interviews, observation and structured frameworks. Future editions may therefore benefit from further practice-based consolidation of tool selection, use of objective and subjective data, and documentation of mental health assessment in routine care.

8. Limitations

The MELODIC training programme evaluation has some limitations that should be considered when interpreting the findings. The pre- and post-training Questionnaire B responses were treated as independent samples, as individual responses could not be paired across time points. Therefore, the results should be interpreted descriptively and cannot be used to infer individual change or causal effects of the training programme.

There was also a reduction in participation and questionnaire response over time. Although 108 participants were enrolled and 83 completed the course, the number of questionnaire respondents decreased from 131 in the pre-training questionnaire to 74 in the post-training questionnaire and Questionnaire A. This may have influenced the post-training results, as respondents who completed the final questionnaires may differ from those who did not respond. The relatively small number of post-training respondents in each country also limits the interpretation of country-level findings.

Participation data should be interpreted with caution. The Netherlands implemented the training programme but had no questionnaire responses in the supplied datasets and was therefore excluded from the questionnaire analyses. In Greece, the participation figures were retained as provided, although some attendance values exceed the number of enrolled participants. These data were kept in the report as available implementation records but should not be interpreted as precise participation indicators.

The evaluation relied on self-reported data, including satisfaction, perceived usefulness, readiness, skills and professional practices during the previous 30 days. These responses may have been influenced by recall bias, social desirability, professional role, local service organisation and participants' recent opportunities to work with young adults with cancer. In addition, the sample was predominantly female and largely composed of nursing professionals, which may limit transferability to other professional groups.

The international and multilingual nature of the evaluation is another limitation. Questionnaires were translated into partner languages and open-ended responses were later translated into English using Google Translate®. Although the structure of the questionnaires was maintained and responses were edited minimally, some linguistic nuances may have been lost in translation.

Finally, the evaluation was conducted shortly after completion of the training programme. It therefore provides information on immediate satisfaction, perceived usefulness, knowledge, readiness and recent practice, but does not allow conclusions about long-term knowledge

retention, sustained changes in clinical practice or impact on young adults with cancer and their families/caregivers.

9. Conclusions and recommendations

The evaluation of the MELODIC training programme indicates that the course was positively received and perceived as relevant, useful and applicable to professional practice. Participants evaluated the learning experience, materials, online access, practical examples and facilitators positively. Most respondents also considered the programme duration and presentation speed appropriate, supporting the feasibility and acceptability of the course structure.

The results suggest that the programme contributed to strengthening participants' awareness, knowledge and perceived readiness to address the mental health needs of young adults with cancer and their families/caregivers. Qualitative feedback reinforced this interpretation, showing that participants valued the programme for increasing understanding of the psychosocial impact of cancer, supporting reflection on practice, providing practical resources and promoting interprofessional and international exchange.

The theoretical knowledge results showed high percentages of correct responses in most domains before and after the training programme, with slightly higher post-training percentages across all four domains. However, interprofessional practice and personal well-being showed the lowest correct-response percentages at both time points, suggesting that this area should be further reinforced in future editions. The attitudes, skills and readiness data also suggest more frequent reported use of mental health support practices after training, particularly interprofessional collaboration, psychosocial support, care pathways, green/blue spaces and social prescribing-inspired activities.

Future editions should maintain the overall structure of four thematic modules, self-paced online learning, contact sessions and a final international symposium. At the same time, the practical component should be strengthened through more clinical case studies, clearer group-work instructions, structured exercises and additional opportunities to apply assessment tools and support strategies to realistic clinical scenarios. Greater emphasis should also be placed on the use of screening and assessment tools, the integration of objective and subjective data, and the documentation and communication of mental health needs within interprofessional teams.

Language accessibility and technical usability should continue to be improved, particularly through careful review of translations, subtitles and terminology, and by providing downloadable materials such as slides, summaries or practical toolkits. The design of

synchronous activities should also be refined to support engagement, with clearer facilitation, sufficient time for discussion and consideration of hybrid or in-person components for activities that depend strongly on interaction, role play and peer exchange.

Overall, the MELODIC training programme represents a promising interprofessional educational intervention to strengthen mental health support for young adults with cancer and their families/caregivers. Future evaluation should consider paired pre-post designs, longer-term follow-up and complementary qualitative or practice-based data to better understand sustained learning, implementation in clinical practice and potential impact on care.

Appendix I - Protocol for MELODIC training programme evaluation

MELODIC

Mental Health Support for Young Adults with Cancer

WP3

Protocol for MELODIC training programme evaluation

Authors	Joaquim de Oliveira Lopes, Margarida Tomás (ESEULisboa)
Version	V2
Date	04.12.2025
Work Package	WP 3
WP Leaders	TUAS

This evaluation protocol of the training programme "Mental Health Support for Young Adults with Cancer" considers the presentation of the evaluation instruments to be used, their characterization and the conditions of use.

TRAINING PROGRAMME ASSESSMENT TOOLS

Questionnaire A – programme general evaluation questionnaire

Anonymous self-completed questionnaire that evaluates participation satisfaction, general feedback of the programme and feasibility of the training.

It has a section dedicated to the evaluation of the learning experience and another dedicated to the evaluation of satisfaction with learning.

The questions are mostly closed, with answers arranged on a Lickert scale with 5 options (Strongly disagree; Disagree; Uncertain; Agree; Strongly agree).

The aspects of the training programme which have been beneficial to the learning and the areas where this programme might be improved to benefit future learners have semi-open questions, with justification.

This questionnaire is to be sent to the participants of the training programme on the last day, for response after the international symposium.

Annex 1

Questionnaire B – Pre and post training programme evaluation questionnaire

Anonymous self-administered questionnaire that evaluates theoretical knowledge, readiness and skills on mental health of people affected by cancer, and intention to change practice.

It comprises three sections:

1- General questions (socio-professional characterization);

2- Theoretical knowledge concerning young adults with cancer mental health needs (22 questions)

3 - Attitudes, skils and readiness concerning young adults with cancer mental health needs

(11 questions)

The questions in section 2, Theoretical knowledge, assess learning on the topics Cancer diagnosis and emotional distress; Mental health impact of cancer diagnosis in family members; Interventions to support mental health; and Interprofessional practice and personal well-being. They are closed-answer questions, with 4 options to choose from and only 1 correct.

The questions in section 3, Attitudes, skills and readiness concerning young adults with cancer mental health needs, assess the readiness and skills on mental health of people affected by cancer, and intention to change practice. These are questions that refer to the exercise of professional practice with young adults with cancer in the past 30 days.

This questionnaire allows pre and post training programme evaluation. The same questions are to be made to training participants before the programme starts and 30 days after the end of the program.

> Pre-test: The invitation to the pre-test is sent to participants one week before the start of the training programme (available for one week). At the end of the questionnaire participants find a link to Moodle in their respective language.
>
> Post-test: the invitation to the post-test is sent 30 days after the end of the training programme (online symposium included) without section 1 General questions, which has already been collected in the pre-test. The questionnaire will be available for one week. At the end of the questionnaire participants find a link to access the request for certificate.

Annex 2

Both questionnaires will be translated by each partner into the language of their respective country. In this translation, the organization of the questionnaires and the numbering of all questions must be strictly adhered to, so that, although formulated in different languages, questionnaires can be treated as a whole.

Once translated, the questionnaires will be converted into Forms format by ESEL and hosted on ESEL servers (Portugal). Access links will be sent to all partners.

The questionnaires will be applied to participants of the training programme in their native language.

ESEL will collect the results of both questionnaires. Open-ended questions, answered in each partner's language will be translated into English and analysed.

A training course evaluation document will be produced and disseminated to all MELODIC partners.

Annex 1

Questionnaire A – programme general evaluation questionnaire

Section 1: Experience of Learning

Please respond to the following statements by choosing **one** number on each line	**Strongly disagree**	**Disagree**	**Uncertain**	**Agree**	**Strongly agree**
I was clear about the purpose of the programme before attending	1	2	3	4	5
This programme met my expectations for learning	1	2	3	4	5
The programme was a worthwhile use of my time	1	2	3	4	5
I believe that the programme has helped me in my work with young adults with cancer and their families	1	2	3	4	5
I would recommend this programme to my co-workers	1	2	3	4	5
The learning materials were interesting	1	2	3	4	5
The learning materials made me feel engaged with the program	1	2	3	4	5
The learning materials provided up-to-date / trustworthy information	1	2	3	4	5
The learning materials used language that was easy to understand	1	2	3	4	5
Online access to the learning materials was useful	1	2	3	4	5
Online access to the learning materials was easy	1	2	3	4	5
The modules used appropriate practical examples to support learning (e.g. case studies)	1	2	3	4	5
The facilitators of the case analysis and discussion were knowledgeable about the topics presented	1	2	3	4	5

The learning materials were clear and organised	1	2	3	4	5
The translated materials/subtitles were clear and easy to understand	1	2	3	4	5
The final symposium enriched my professional network with other participants	1	2	3	4	5

The length of the programme was:	**Too long**	**Just right**	**Too Short**
The speed of presentations/videos was:	**Too slow**	**Just right**	**Too fast**

Please identify three aspects of this programme which have been beneficial to your learning (and why):

_____

Please identify any areas where this programme might be improved to benefit future learners (and why):

_____

Section 2: Satisfaction with Learning

Please respond to the following statements by choosing **one** number on each line	**Strongly disagree**	**Disagree**	**Uncertain**	**Agree**	**Strongly agree**
The programme has met my educational and learning needs	1	2	3	4	5
I believe the contents of this programme have increased my knowledge about the mental health needs of YAC and their family members	1	2	3	4	5
I believe the contents of this programme have increased my knowledge about cancer diagnosis and emotional distress in YAC	1	2	3	4	5
I believe the contents of this programme have increased my knowledge about the mental health impact of cancer diagnosis in family members	1	2	3	4	5
I believe the contents of this programme have increased my knowledge of screening methods for the mental health of YAC	1	2	3	4	5

I believe the contents of this programme have increased my knowledge of psychosocial support strategies to improve the mental health of YAC	1	2	3	4	5
The programme was helpful in improving my ability to recommend that YAC spend time in green and/or blue spaces to support their mental health	1	2	3	4	5
The programme was helpful in improving my ability to recommend YAC other Social Prescribing inspired activities to support their mental health	1	2	3	4	5
I believe the contents of this programme have increased my knowledge of the benefits of interprofessional collaboration in addressing the needs of YAC	1	2	3	4	5
The programme was useful in increasing my openness towards interprofessional care concerning the needs of YAC	1	2	3	4	5

Annex 2

Questionnaire B - Pre and post training programme evaluation questionnaire

Part 1 - general questions

1.1 Age
1.2 Gender: (male/female/non-binary/prefer not to say)
1.3 Country of birth
1.4 Country of residence
1.5 Profession:
1.5.1 Nurse
specialization: [open]
1.5.2 Medical doctor
specialization: [open]
1.5.3 Health Visitor/Community Health Scientist
1.5.4 Psychologist
1.5.5 Social worker
1.5.6 Other, specify:
1.6 Work setting
1.7 Years of working experience with YA with cancer

Part 2 – Theoretical knowledge concerning YAC mental health needs

2.1 Cancer diagnosis and emotional distress (6 questions)
2.1.1 After cancer diagnosis, what is the determining factor for considering emotional distress as clinically relevant?

A) The type of tumor and stage of the disease.
B) The intensity and persistence of symptoms, with significant functional impact. ✅
C) The time elapsed since diagnosis.
D) The type of treatment received.

2.1.2 What is the main clinical implication of not systematically assessing emotional distress in people with oncological disease?

A) Increased adherence to treatment.
B) Risk of lower quality of life and treatment abandonment. ✅
C) Reduction of the need for psychological support.
D) Spontaneous improvement of the emotional state.

2.1.3 Which of the following statements correctly reflects the specific vulnerability of young adults with cancer to emotional distress?

A) It is comparable to that of adolescents without oncological disease.
B) It is higher than that of young adults without cancer and that of older adults with

cancer. ✅
C) It is lower than in elderly people with cancer.
D) There is no significant difference between age groups.

2.1.4 Among young adults with cancer, what are the most prevalent mental disorders and why do they stand out?
A) Psychotic disorders, due to the impact of the medication.
B) Anxiety and depression, due to the combination of uncertainty about the future and developmental challenges. ✅
C) Eating disorders, due to changes in body image.
D) Personality disorders, due to family and genetic vulnerability.

2.1.5 How can the patient-centred approach emotionally benefit young adults with cancer?
A) Promotes autonomy and sense of control over the therapeutic pathway. ✅
B) Avoids participation in clinical decisions.
C) Ensures that distress does not occur, because it considers the integration of psychosocial needs in the therapeutic plan.
D) Limits support to physical needs, ignoring emotional ones.

2.1.6 Which of the following criteria is most useful in distinguishing mental symptoms from symptoms resulting from side effects of cancer therapy in young adults with cancer?
A) The presence of persistent fatigue after chemotherapy always indicates depression.
B) Mental symptoms involve cognitive and emotional changes, and the side effects of therapy are associated with specific physiological mechanisms. ✅
C) The side effects of therapy never affect emotional well-being.
D) Mental symptoms disappear automatically after the end of treatment.

2. 2 Mental health impact of cancer diagnosis in family members (6 questions)

2.2.1 What is one of the main emotional challenges faced by family members of young adults with cancer?
A) Control of the emotional impact, given that the focus is only on the family member with the disease.
B) The psychological overload associated with continuous support and uncertainties about the future. ✅
C) The management of conflicts between family members in the face of unexpected therapeutic failures.
D) The maintenance of emotional indifference in relation to the therapeutic path of young adults with cancer.

2.2.2 How can the experience of family members of young adults with cancer influence the therapeutic path of those young adults?
A) It has no impact on the clinical process.
B) It can positively affect treatment adherence when there is consistent emotional support. ✅
C) It automatically guarantees the cure of the disease.

D) It replaces the intervention of the multidisciplinary team.

2.2.3 How can family distress alter the effectiveness of the support offered to young adults with cancer?

A) It has no impact on the relationship between family and the young adult with cancer.
B) It can generate emotional overload and conflicts, reducing the family's ability to provide consistent and functional support. ✅
C) Automatically guarantees greater adherence to treatment, regardless of the quality of the support.
D) It replaces the need for specialized psychological support.

2.2.4 Among the most common signs of distress in family members of young adults with cancer, which is the one that best shows emotional overload and risk of negative impact on the support of young adults with cancer?

A) Emotional fatigue accompanied by irritability and difficulty concentrating. ✅
B) Reduction of family cohesion without negative repercussions for the young adult with cancer.
C) Increased manifestations of anxiety in the family after the beginning of treatment.
D) Strengthening family cohesion with negative repercussions for young adults with cancer.

2.2.5 Which of the following represents a significant barrier to effective communication between healthcare professionals and family members of young adults with cancer?

A) Clarity in the transmission of clinical information.
B) Use of excessive technical language, which makes it difficult for the family to understand. ✅
C) Availability of time for active listening.
D) Integration of the family in the therapeutic decision-making process.

2.2.6 How can emotional factors constitute barriers to communication with family members of young adults with cancer?

A) Family emotions do not influence communication with the health team.
B) Anxiety always increases the ability to understand clinical information.
C) Fear ensures greater adherence to medical recommendations.
D) Anxiety and fear can lead to distorted interpretations or resistance to receiving detailed information. ✅

2.3 Interventions to support mental health (6 questions)

2.3.1 What is the main clinical advantage of using direct self-disclosure requests in identifying distress in young adults with cancer?

A) It allows the health care professional to avoid addressing emotional topics, focusing only on the technical aspects.
B) Facilitates the explicit expression of feelings and concerns, reducing the risk of underestimation of emotional distress. ✅
C) Ensures that all patients have the same level of clinical support.
D) Replaces the need for validated psychological screening instruments.

2.3.2 How does the technique of summarizing and clarifying patients' statements contribute to the identification of distress in young adults with cancer?

A) It has no impact, as only physical symptoms should be considered.
B) It helps to confirm mutual understanding, validating feelings and revealing signs of distress that could otherwise remain implicit. ✅
C) Automatically eliminates the need for psychological support.
D) Ensures that the distress disappears after the initial communication.

2.3.3 In choosing instruments that support the assessment of distress, it makes sense to choose:

A) Glasgow Scale, Patient Health Questionaire-9 (PHQ-9) and General Anxiety Disorder-7 (GAD-7).
B) Patient Health Questionaire-9 (PHQ-9), General Anxiety Disorder-7 (GAD-7) and Distress Thermometer. ✅
C) General Anxiety Disorder-7 (GAD-7), Mini-Mental State Examination (MMSE) and Distress Thermometer.
D) General Anxiety Disorder-7 (GAD-7), Glasgow Scale and Braden Scale.

2.3.4 How does the level of education influence the need for information in distressed young adults with cancer?

A) The level of education has no impact on the search for or understanding of clinical information.
B) Young people with less education do not need additional information, as they rely only on the medical team.
C) Young people with higher education tend to seek detailed and critical information, increasing the need for clear and evidence-based communication. ✅
D) Young people with higher education are less interested in participating in therapeutic decisions.

2.3.5 Which of the following situations does not correspond to the concept of Social Prescribing?

A) Refer a patient to volunteer activities or community groups to reduce social isolation.
B) Integrate social and cultural resources into the therapeutic plan in a complementary way.
C) Promote participation in physical exercise or learning programs to improve well-being.
D) Prescribing medicines within the scope of a health service located in the community. ✅

2.3.6 Which of the following most accurately reflects the role of the frequency of Green and Blue spaces in the integrated treatment of young adults with cancer?

A) They work as a substitute for conventional medical therapy, eliminating the need for clinical intervention.
B) They contribute to reduce distress and improve quality of life, through the promotion of psychosocial well-being and physiological regulation of stress. ✅
C) They are a good therapeutic resource for the prevention of cancer-related mental

disorders, regardless of the type of cancer or stage of therapy.
D) They eliminate the side effects of chemotherapy, reducing the requirement for specialized multidisciplinary follow-up.

2.4 Interprofessional practice and personal well-being (4 questions)

2.4.1 Which of the following statements best reflects why interprofessional care is essential for young adults with cancer?

A) Because young adults with cancer have complex medical needs, which is why doctors should collaborate more with each other.
B) Because interprofessional care guarantees greater efficacy in the treatment and cure of the disease, without the need to intensify conventional therapy.
C) Because young adults with cancer have complex and interdependent needs, requiring coordination between different professional areas. ✅
D) Because young adults with cancer need greater psychosocial support in the early stages of cancer treatment.

2.4.2 Two of the most relevant strategies to improve interprofessional care are:

A) The joint participation in scientific congresses, and the supervision practices between elements of the same profession.
B) The conduct of multidisciplinary research, and the practices of intervision between elements of the same profession.
C) The attendance of training on conflict management, and participating in scientific meetings.
D) The creation of a shared lexicon for practice and research, and the improvement of teamwork and communication between sectors. ✅

2.4.3 Which of the following statements does not reflect the impact of interprofessional care on the work experience of health professionals accompanying young adults with cancer?

A) Promotes the fragmentation of responsibilities and improves communication between the entire health and social team. ✅
B) Favors collaboration, reduces duplication of tasks and improves job satisfaction by promoting an environment of mutual support.
C) Reduces the fragmentation of responsibilities and improves communication between the entire interprofessional team.
D) Optimizes the intersectoral relationship within the scope of a broad understanding of health.

2.4.4 Which of the following strategies contribute to promoting inclusive and culturally sensitive communication by health professionals:

A) Training in cultural skills and the creation of digital health solutions. ✅
B) The creation of digital health solutions and the improvement of diagnostic and therapeutic classification systems.
C) Improving the quality of health professionals' records and training in a foreign language.
D) The institutional dissemination of inclusive communication rules and the frequency of training actions on teamwork.

Part 3 – Attitudes, skils and readiness concerning YAC mental health needs

3.1 Over the past 30 days, how frequently have you assessed YACs' mental health needs

1 2 3 4 5 6 7 8 9 10
Never Always

3.2 If you have done so in the past 30 days, did you use assessment tools?

- Yes
- No

3.2.1 If you responded "Yes", identify the assessment tools you used (open)

3.3 If you have done so in the past 30 days, did you use objective and subjective data in the interview?

- Yes
- No

3.3.1 If you responded "Yes", identify the objective and subjective data you used (open)

3.4 Over the past 30 days, how often have you sought interprofessional collaboration regarding the mental health needs of YACs?

1 2 3 4 5 6 7 8 9 10
Never Always

3.5 Over the past 30 days, how often have you engaged with YAC care pathways and provided guidance to health and other support services?

1 2 3 4 5 6 7 8 9 10
Never Always

3.6 Over the past 30 days, how often have you implemented psychosocial support addressed to YAC mental health needs?)

1 2 3 4 5 6 7 8 9 10
Never Always

3.7 Over the past 30 days, how often have you recommended YAC to spend time in green and/or blue spaces to support their mental health?

1 2 3 4 5 6 7 8 9 10
Never Always

3.8 Over the past 30 days, how often have you recommended YAC other Social Prescribing inspired activities to support their mental health?

1 2 3 4 5 6 7 8 9 10
Never Always

3.8.1 If you have recommended YAC other Social Prescribing inspired activities to support their mental health, identify what kind of activities (may be more than one):

- Arts and culture
- Digital
- Physical activity
- Practical suport
- Social support
- Education
- Nature-based
- Spiritual

Appendix II - Open-ended responses from Questionnaire A

Open-ended responses from Questionnaire A - Programme general evaluation

Editorial note: The table presents all feedback entries for the two open-ended questions in Questionnaire A. Responses were edited only minimally for readability, including punctuation, obvious typographical errors and British English spelling, while preserving the original meaning and context. Cells corresponding to blank responses or dash-only entries were left blank.

Estonia

Participant	Beneficial aspects of the programme	Suggested areas for improvement
Participant 1	I got a lot of insider information about how cancer affects so many aspects of a young person's life, how different specialists interact with young people with cancer and to what extent, and how important cooperation between specialists and institutions is. At the same time, I learned how crucial it is that all professionals know how to communicate humanely with people with cancer and show interest in their treatment and life.	Perhaps elements of motivational interviewing or solution-focused brief therapy could be included, so that specialists working in hospitals, in particular, could immediately start using something from there in their work and it would be even more practice-oriented.
Participant 2	The online format: there was no need to participate on site. Availability of materials: the materials were available throughout the entire course. Timing: there was plenty of time to complete the course modules.	
Participant 3	Raising awareness in this field, support options from both the patients' and healthcare professionals' perspectives, and integrating opportunities for collaboration into everyday work.	The translation of the learning materials was at times difficult to understand. The part about preparation for the webinar could be specified more clearly.
Participant 4		Check the suitability of the target group or reduce the amount of group work.
Participant 5	Logical structure, sufficient time allocated to each module, and contact seminars after each module.	More participants, greater impact. This information is necessary for all healthcare professionals!

Participant	Beneficial aspects of the programme	Suggested areas for improvement
Participant 6	I gained a much better understanding of how cancer affects so many different aspects of a young person's life. My awareness of support options increased, both from the patients' and healthcare professionals' perspectives. This enables me to provide better support and to listen more attentively.	
Participant 7	The impact of a cancer diagnosis on mental health helped me to better understand how cancer affects the emotional well-being and everyday life of young adults. The importance of supporting family members clearly highlighted that the patient's close relatives also need support, not only the patient themselves. Interdisciplinary collaboration and occupational well-being helped me to understand the importance of teamwork and the mental well-being of healthcare professionals in ensuring high-quality patient care.	More practical examples and case-based discussions would help to better relate theory to real clinical situations.
Participant 8	Understanding, courage, vision.	Group discussions could be shorter in duration.
Participant 9	Possibility to complete the modules at a personally suitable pace and time. Possibility to rewatch the lectures. Possibility to use additional materials.	I was very satisfied with the structure of the training.
Participant 10	The final seminar highlighted the situation regarding support for young cancer patients in Europe. I learned what the differences are between young cancer patients and older patients. My critical thinking skills developed.	The translation of the training materials could be covered more consistently.
Participant 11	I learned that the problems of young cancer patients, the way they are approached, and communication with their families are different; I analysed the situation in Estonia and gained new contacts.	Maybe I would like to have more materials in Estonian and compact information about the support options available in Estonia, which I could share in the future.

Participant	Beneficial aspects of the programme	Suggested areas for improvement
Participant 12	Especially, I liked the videos where the counsellor talked with the patient; the self-care options shown in module 4 (as links), the step-by-step creation of a self-care plan, and the case descriptions and their analysis.	I understand that this is a pilot project and not yet fully polished. At least on my computer, it was not possible to answer some of the self-check questions (I even tried all the options, just in case), and there are still a few technical errors.
Participant 13	The training made me reflect on what to pay attention to when working with young cancer patients. It provided information about how things are done abroad. I believe that in the future I will be more confident when communicating with young cancer patients.	Better translated materials, at least one meeting to get to know the parties involved.
Participant 14	It was possible to plan my own time, the online materials, and prior work experience with oncological patients.	The online seminar days could have been communicated earlier so that the work schedule could have been better arranged around the seminar.
Participant 15	Possibility to plan my own study time, materials easy to understand.	Some seminars could have been held in person.

Finland

Participant	Beneficial aspects of the programme	Suggested areas for improvement
Participant 1	Multiprofessional cooperation, importance of psychosocial support, blue room, green room, etc.	
Participant 2	I have received help in mapping and identifying psychological resources. It is also useful to take into account the state of the entire family. I think supporting the resources of a cancer patient was the most important gift, because I was	It would be useful to memorize the slide sets so that you can return to what you have learned if necessary.

Participant	Beneficial aspects of the programme	Suggested areas for improvement
	not necessarily able to identify these sufficiently or was not able to provide the patient with such comprehensive means to maintain resources.	
Participant 3	I think the information was already there, but all the metrics were new information and certainly useful to use. The ideas related to nature were also really useful.	It would certainly have been good if the teachers had also been in the rooms when the cases were being discussed; someone could have been there to prepare the task a little.
Participant 4	Long-term disadvantages (they are easily forgotten at work), and videos showing direct patient contact were useful.	The tasks/material for contact teaching were somehow unclear, so that a proper discussion could not be had.
Participant 5	The joint contact teaching sessions were useful and gave us a lot of new ideas, including the symptoms of mental health in young people and their description, and cooperation between professionals.	I would like to see more practical working methods and themes about meeting patients, as well as practical exercises.
Participant 6	Indicators, discussion with others, multidisciplinary collaboration.	The first discussion was interesting; the later ones were a bit repetitive and no discussion took place. There were maybe four people in the discussion room, two of whom had microphones that did not work, so no discussion took place.
Participant 7	Discussions in small groups, networking, international sources, raising indicators.	Sharpen to be clearer, eliminate repetition, perhaps less material, work on concrete things.
Participant 8	1. Indicators: identification and screening of mental health challenges; these are still little utilized in the care of cancer patients and enable the provision of early support. 2. Referral to the right kind of treatment and support, because it strengthens practical action in helping the patient. 3. Supporting the comprehensive mental health of young adults and their loved ones, because it	Adding practical tools and concrete operating models to make it easier to apply what has been learned to clinical work, e.g., treatment pathway models. Taking into account loved ones and networks more systematically, because they are a central part of a young adult's overall well-

Participant	Beneficial aspects of the programme	Suggested areas for improvement
	expands the understanding of the patient's life situation, consideration of loved ones and continuity of care.	being, e.g., what kind of operating models could be used for this in practice, such as family discussions, etc. Opening up these models more widely.

Greece

Participant	Beneficial aspects of the programme	Suggested areas for improvement
Participant 1	At my job, because I work with oncology patients.	Doctors who deal with oncology patients should have more knowledge.
Participant 2	Screening detection methods, treatment of emotional distress, social prescribing.	Longer programme duration.
Participant 3	Enrichment of knowledge, interaction with health professionals and exchange of experience.	The video presentations were very fast and required a lot of repetition. More bibliography in Greek would have been useful.
Participant 4	Information, evaluation, management.	Experiential workshop.
Participant 5	The programme helped me to understand more deeply the social and emotional difficulties faced by young people with cancer. Also, through the examples and experiences presented, I was able to connect theory with practice. Finally, the interaction and discussion with the other participants gave me new perspectives and ideas.	The programme was very useful and well organised. Perhaps more time could be given for activities and discussion among participants.
Participant 6	The educational material was rich and interesting, and the tools presented were particularly useful.	The subtitles were not particularly clear.

Participant	Beneficial aspects of the programme	Suggested areas for improvement
Participant 7	I work in anti-cancer care and it was beneficial.	
Participant 8	Case studies, working in smaller groups, keeping to time.	
Participant 9	Case study, multidisciplinary group discussion, asynchronous material.	
Participant 10	1. It was beneficial that I got to know structures that I did not know about (e.g., K3) and that I could recommend to cancer patients. 2. It was interesting to see how they work in other countries (e.g., websites and networks in the Netherlands). 3. I learned about some questionnaires that I did not know about and that might be useful in the future (e.g., thermometer).	1. The Greek translations could have been a little better in some places. 2. I would divide the seminar into sections based on the time of diagnosis and talk about the corresponding interventions (e.g., 1 - as soon as the diagnosis was made; 2 - during treatments; 3 - after the end of treatments; 4 - recurrence of the disease; 5 - final stage). 3. I would either do smaller groups or allow more time so that everyone could participate. 4. I would prefer it to be in person, or at least if there was this possibility. 5. I would not spend time on so many theoretical models (there are even more); I would choose one and rely on it. I would suggest the Common Sense Model of Illness, which is very good for diseases. There is also material for cancer and it also has a questionnaire that could be used (Illness Perception Questionnaire).

Ireland

Participant	Beneficial aspects of the programme	Suggested areas for improvement
Participant 1	I learned new tools to help patients in distress. Hearing opinions from different disciplines was helpful. It encouraged me to self-reflect on areas in my department.	The case studies were vague and led to difficulties in how to guide the discussion around them.
Participant 2	How to approach and interact with young adults going through this difficult time and how best to help them.	
Participant 3	Hearing lived experiences at the final symposium, exchanging experiences with colleagues working in different specialties during the contact sessions, and access to papers and resources which I can practically use in my work. All of these aspects were helpful as they enriched my understanding of the core principles of the course through real-life examples. I can take much of this forward into my work.	I was happy with this course.
Participant 4	I am better able to recognize emotional distress. I feel more equipped to evaluate emotional/psychological distress. I feel better equipped to help our patients and caregivers.	I felt there was not enough time to get modules completed for the group sessions.
Participant 5		The case studies were quite repetitive and breakout groups, regardless of the week, yielded the same answers.
Participant 6	Case studies were good to see how to put the principles into practice. The overview of the assessment tools was good.	Being able to access the videos as a PDF or a slideshow to be able to print them off. The language/terminology in parts of the presentations/questions could be simplified or restructured; sometimes it was difficult to interpret.

Participant	Beneficial aspects of the programme	Suggested areas for improvement
Participant 7	Being on a team where we were able to discuss cases and share experiences and resources.	There was some technical issue when in the meeting room.
Participant 8	How to approach young adults, what they are going through, and what their parents are going through.	Maybe just one-day training.
Participant 9	(1) Presentations with voice-over: the voice-over presentations made the content easier to understand, especially as a non-native English speaker. Hearing the explanation while viewing the slides helped me follow the information more clearly and at my own pace. (2) Good balance between theory, materials, and exercises: the programme offered a useful balance between insight, background information, learning materials, and practical exercises. This helped me not only understand the concepts, but also apply them in practice. (3) Combination of online learning and reflection meetings: I appreciated the combination of online learning, which I could complete in my own time, and specific reflection meetings. The online part gave flexibility, while the reflection meetings helped deepen my understanding by discussing experiences and learning from others.	One area where the programme might be improved is by creating a continuous forum, Padlet, or shared online space for working on the clinical cases. This would allow participants to continue discussing cases outside the scheduled reflection meetings. It could make it easier to share insights, compare different perspectives, and learn from the experiences of all participants. A shared space, over the total course, could also help learners revisit ideas later and deepen their understanding over time.
Participant 10	Better understanding of young adults' psychological needs, useful communication and support strategies, improved awareness of holistic and multidisciplinary care.	Greater focus on cultural and individual differences. Clearer guidance on applying concepts in clinical settings. More time for discussion and reflection.
Participant 11	Detailed case studies when theory was put into practice, interactions with other learners, feedback from the facilitator.	From my point of view, online sessions might be scheduled after normal working hours to facilitate better attendance.

Participant	Beneficial aspects of the programme	Suggested areas for improvement
Participant 12	Learning about cancer distress, learning about management of the same, and learning from other allied health professionals in other areas - all helps in day-to-day practice and has practical applications for care.	I think the online group discussions were ineffective at times, too long, not working properly and slightly repetitive.
Participant 13	Clinical screening tools, the family and caregiver dynamic, interprofessional collaboration and professional well-being.	
Participant 14	Making connections with other services working with AYA with cancer made me more aware of other resources available to my patients.	Potentially targeting those newer to their career with guest speakers with more practical experience.
Participant 15	Keep an open mind to what is going on for the patient and family. A multidisciplinary approach is very valuable for all concerned; it was also good to be reminded about self-care.	
Participant 16	The mental health impact of cancer on the patient and family member, intervention to support mental health, interprofessional collaboration.	
Participant 17	It was useful to take time to reflect on the types of mental health issues that arise for young patients undergoing cancer treatment; however, it would have been useful to have a nurse practitioner or another health care professional with more insight into the nuances of managing a clinical caseload.	Although the online format provided ease of access to the course, it also meant it was difficult to 'tune in to' the course sessions properly. I still had to carry my work phone and answer urgent queries while logged into the online sessions. I think this type of course works better when you attend in person, as you can then give it your full attention and you are not sitting in your work environment with all the interruptions and distractions that go with that. From discussions with other participants in the breakout rooms, I know that many people found it difficult to give the course their full attention. If it had been held over two consecutive

Participant	Beneficial aspects of the programme	Suggested areas for improvement
		days in person, I think I would have found the course much more beneficial.
Participant 18	Think differently when I approach young adults, incorporate families more, more tailored care.	I do not think it is suitable for fully online delivery; it was difficult to engage with people, particularly in the breakout groups and the role play. I think a hybrid model would be more suitable.

Portugal

Participant	Beneficial aspects of the programme	Suggested areas for improvement
Participant 1	The interaction with other health professionals always enriches our knowledge; the sharing of experiences by the facilitators of contact lessons brings other situations we do not deal with and offers us more knowledge and more 'tips' for practice; the interaction with other colleagues and facilitators, even in situations we are familiar with, brings a different perspective, and this helps us to better deal with patients and healthcare teams.	I wish I had more time to work on clinical cases. It was very enriching.
Participant 2	Practical examples adaptable to our context, recommended literature that is easy to access and understand, and synchronous sessions for discussing the topics covered.	Videos in PDF/Word format to make it easier to consult later and study better.
Participant 3	Being designed for multidisciplinary groups, because the exchange of experiences is more enriching; linking theory with facilitators connected to the school with experienced professionals in the field; having both synchronous and asynchronous aspects, allowing for greater flexibility; and the ability to repeat videos for better understanding.	There should be an in-person component prior to the course in order to bring the majority of trainees to the same level.

Participant	Beneficial aspects of the programme	Suggested areas for improvement
Participant 4	The most important aspect was learning not to assume the significance of what patients say and to seek further clarification with questions that end up being very simple. Also very important was identifying certain areas of importance for young adults with cancer that may be overlooked throughout the process (for example, fertility). But above all, meaningful communication ends up being much simpler than it sometimes seems.	The only aspect that fell short was in the synchronous sessions, where logistical difficulties somewhat limited the time for group activities, activities that I considered very relevant and interesting.
Participant 5	1. Autonomy and personalized pace (allowed for multiple reviews of recorded content and adapted to individual learning speeds). 2. Geographical and scheduling flexibility (allowed for balancing studies with professional activity; eliminated the rigidity of fixed in-person schedules). 3. Diversity and global networking (possibility of learning about different European realities regarding the same problem).	Translation of the programme's initial videos (to facilitate understanding); more time for synchronous classes for discussion and analysis of case studies.
Participant 6	Integrating the programme into the busy daily clinical practice.	
Participant 7	Introducing assessment scales; the facilitators' willingness to listen to us; and the projection of some learnings into practice.	I believe that online learning loses some of the essence of sharing, group unity, and the real confrontation that occurs in person. Because I believe that in-person sharing fosters different reactions, and when dealing with young adults, this is very important. And I felt the need for some 'theory' to be explained by the facilitators.
Participant 8	Greater understanding of the psychological impact of cancer on young adults; I learned practical strategies for emotional support; I increased my knowledge in the area, particularly in active listening.	In my specific situation: translation of available materials.

Participant	Beneficial aspects of the programme	Suggested areas for improvement
Participant 9	The knowledge that was passed on to me, the opportunity to reflect on the subject, the methods used for learning.	Perhaps having the materials in Portuguese would be easier for some participants.
Participant 10	Theoretical support content, examples such as videos, synchronous sessions, with the wealth of experiences of the participants and facilitators.	More clarity in some modules regarding their use.
Participant 11	The information provided prior to the meeting with the other trainees, so that we are all up to speed on the subject; the online symposium meeting with the other course participants for sharing knowledge and experiences; and the models for clinical practice.	Instead of separate videos, it would be easier to access them later for study if they were in PowerPoint/PDF format.
Participant 12	It was beneficial for us to acquire a greater capacity to anticipate the mental, and not just physical, needs of young adult patients in the process of a first cancer diagnosis, to be able to provide the necessary support to family members who are essentially the primary caregivers, with the aim of instructing them on how to deal with the emotions of young adults with cancer, and to be able to manage our own emotions as formal caregivers of these patients.	At the platform level (Moodle), I feel that there were some issues in the learning process, particularly in the viewing of certain videos that would have been important to discuss during the online sessions, as well as in making effective use of the time in those same sessions, with the aim of covering the topics of each module in greater depth.

Appendix III - Reflexive content analysis

Reflexive content analysis of open-ended responses from Questionnaire A

Methodological note: This appendix presents the full descriptive Reflexive Content Analysis (RCA) of the open-ended responses reported in Appendix I. The two open-ended questions were analysed together. Coding focused on manifest meaning, using concise meaning units drawn directly from participant wording where possible. Each coded meaning unit was assigned to one best-fit subcategory only. The value n refers to the number of coded meaning units/illustrative extracts, not the number of participants. Country and participant identifiers are provided after each extract for auditability.

Total coded meaning units: n = 245.

Category	Subcategories	Codes
1. Understanding the psychosocial impact of cancer on young adults and families (n = 39)	1.1 Emotional and mental health impact of cancer on young adults (n = 11)	"I got a lot of insider information about how cancer affects so many aspects of a young person's life" (Estonia, P1); "I gained a much better understanding of how cancer affects so many different aspects of a young person's life" (Estonia, P6); "The impact of a cancer diagnosis on mental health helped me to better understand how cancer affects the emotional well-being and everyday life of young adults" (Estonia, P7); "The symptoms of mental health in young people and their description" (Finland, P5); "Supporting the comprehensive mental health of young adults and their loved ones" (Finland, P8); "The programme helped me to understand more deeply the social and emotional difficulties faced by young people with cancer" (Greece, P5); "I am better able to recognize emotional distress" (Ireland, P4); "Learning about cancer distress, learning about management of the same" (Ireland, P12); "The mental health impact of cancer on the patient and family member" (Ireland, P16); "The types of mental health issues that arise for young patients undergoing cancer treatment" (Ireland, P17); "Greater understanding of the psychological impact of cancer on young adults" (Portugal, P8).
	1.2 Family, caregiver and relational needs (n = 9)	"The importance of supporting family members clearly highlighted that the patient's close relatives also need support, not only the patient themselves" (Estonia, P7); "Communication with their families is different" (Estonia, P11); "It is also useful to take into account the state of the entire family" (Finland, P2); "Consideration of loved ones and continuity of care" (Finland, P8); "What their parents are going through" (Ireland, P8); "The family and caregiver dynamic" (Ireland, P13); "Keep an open mind to what is going on for the patient and family" (Ireland, P15); "Incorporate families more" (Ireland, P18); "Provide the necessary support to family members who are essentially the primary caregivers" (Portugal, P12).
	1.3 Holistic and person-centred understanding of care (n = 8)	"Show interest in their treatment and life" (Estonia, P1); "Supporting the resources of a cancer patient was the most important gift" (Finland, P2); "Provide the patient with such comprehensive means to maintain resources" (Finland, P2); "It expands the understanding of the patient's life situation" (Finland, P8); "Improved awareness

Category	Subcategories	Codes
		of holistic and multidisciplinary care" (Ireland, P10); "Think differently when I approach young adults" (Ireland, P18); "More tailored care" (Ireland, P18); "Anticipate the mental, and not just physical, needs of young adult patients in the process of a first cancer diagnosis" (Portugal, P12).
	1.4 Increased awareness, reflection and confidence in approaching young adults with cancer (n = 11)	"Raising awareness in this field" (Estonia, P3); "Understanding, courage, vision" (Estonia, P8); "I learned what the differences are between young cancer patients and older patients" (Estonia, P10); "My critical thinking skills developed" (Estonia, P10); "I learned that the problems of young cancer patients are different" (Estonia, P11); "The training made me reflect on what to pay attention to when working with young cancer patients" (Estonia, P13); "I believe that in the future I will be more confident when communicating with young cancer patients" (Estonia, P13); "Enrichment of knowledge" (Greece, P3); "Information, evaluation, management" (Greece, P4); "I increased my knowledge in the area" (Portugal, P8); "The knowledge that was passed on to me, the opportunity to reflect on the subject" (Portugal, P9).
2. Clinical usefulness and application to practice (n = 45)	2.1 Screening, assessment tools and indicators (n = 10)	"The metrics were new information and certainly useful to use" (Finland, P3); "Indicators" (Finland, P6); "Raising indicators" (Finland, P7); "Indicators: identification and screening of mental health challenges; these are still little utilized in the care of cancer patients and enable the provision of early support" (Finland, P8); "Screening detection methods" (Greece, P2); "I learned about some questionnaires that I did not know about and that might be useful in the future" (Greece, P10); "I feel more equipped to evaluate emotional/psychological distress" (Ireland, P4); "The overview of the assessment tools was good" (Ireland, P6); "Clinical screening tools" (Ireland, P13); "Introducing assessment scales" (Portugal, P7).
	2.2 Communication strategies and therapeutic interaction (n = 8)	"All professionals know how to communicate humanely with people with cancer" (Estonia, P1); "The way they are approached, and communication with their families are different" (Estonia, P11); "How to approach and interact with young adults going through this difficult time and how best to help them" (Ireland, P2); "How to approach young adults" (Ireland, P8); "Useful communication and support strategies" (Ireland, P10); "Learning not to assume the significance of what patients say and to seek further clarification" (Portugal, P4); "Meaningful communication ends up being much simpler than it sometimes seems" (Portugal, P4); "I learned practical strategies for emotional support; I increased my knowledge in the area, particularly in active listening" (Portugal, P8).
	2.3 Practical support strategies, referral options and resources (n = 10)	"Support options from both the patients' and healthcare professionals' perspectives" (Estonia, P3); "My awareness of support options increased, both from the patients' and healthcare professionals' perspectives" (Estonia, P6); "This enables me to provide better support and to listen more attentively" (Estonia, P6); "Compact information about the support options available in Estonia, which I could share in the future" (Estonia, P11); "Referral to the right kind of treatment and support, because it strengthens practical action in helping the patient" (Finland, P8); "Structures that I did not know about and that I could recommend to cancer patients" (Greece, P10); "I learned new tools to help patients in distress" (Ireland, P1); "I feel better equipped

Category	Subcategories	Codes
		to help our patients and caregivers" (Ireland, P4); "Intervention to support mental health" (Ireland, P16); "Instructing them on how to deal with the emotions of young adults with cancer" (Portugal, P12).
	2.4 Social prescribing, green/blue spaces and self-care resources (n = 9)	"Occupational well-being helped me to understand the importance of teamwork and the mental well-being of healthcare professionals" (Estonia, P7); "The self-care options shown in module 4" (Estonia, P12); "The step-by-step creation of a self-care plan" (Estonia, P12); "Blue room, green room, etc." (Finland, P1); "The ideas related to nature were also really useful" (Finland, P3); "Social prescribing" (Greece, P2); "Professional well-being" (Ireland, P13); "It was also good to be reminded about self-care" (Ireland, P15); "Manage our own emotions as formal caregivers of these patients" (Portugal, P12).
	2.5 Translation of learning into daily clinical practice (n = 8)	"At my job, because I work with oncology patients" (Greece, P1); "I work in anti-cancer care and it was beneficial" (Greece, P7); "I was able to connect theory with practice" (Greece, P5); "I can take much of this forward into my work" (Ireland, P3); "All helps in day-to-day practice and has practical applications for care" (Ireland, P12); "Integrating the programme into the busy daily clinical practice" (Portugal, P6); "The projection of some learnings into practice" (Portugal, P7); "This helps us to better deal with patients and healthcare teams" (Portugal, P1).
3. Interprofessional, peer and international learning (n = 33)	3.1 Multidisciplinary exchange and collaboration (n = 12)	"How different specialists interact with young people with cancer and to what extent" (Estonia, P1); "How important cooperation between specialists and institutions is" (Estonia, P1); "Integrating opportunities for collaboration into everyday work" (Estonia, P3); "Interdisciplinary collaboration helped me to understand the importance of teamwork" (Estonia, P7); "Multiprofessional cooperation" (Finland, P1); "Cooperation between professionals" (Finland, P5); "Multidisciplinary collaboration" (Finland, P6); "Multidisciplinary group discussion" (Greece, P9); "Interprofessional collaboration" (Ireland, P13); "A multidisciplinary approach is very valuable for all concerned" (Ireland, P15); "Interprofessional collaboration" (Ireland, P16); "Being designed for multidisciplinary groups, because the exchange of experiences is more enriching" (Portugal, P3).
	3.2 Learning from peers, facilitators and lived/professional experience (n = 12)	"Interaction with health professionals and exchange of experience" (Greece, P3); "The interaction and discussion with the other participants gave me new perspectives and ideas" (Greece, P5); "Hearing lived experiences at the final symposium" (Ireland, P3); "Exchanging experiences with colleagues working in different specialties during the contact sessions" (Ireland, P3); "Being on a team where we were able to discuss cases and share experiences and resources" (Ireland, P7); "Learn from the experiences of all participants" (Ireland, P9); "Interactions with other learners, feedback from the facilitator" (Ireland, P11); "The sharing of experiences by the facilitators of contact lessons brings other situations we do not deal with and offers us more knowledge and more tips for practice" (Portugal, P1); "The interaction with other colleagues and facilitators, even in situations we are familiar with, brings a different perspective" (Portugal, P1); "Linking theory with facilitators connected to the school with experienced professionals in the field" (Portugal, P3); "The

Category	Subcategories	Codes
		facilitators' willingness to listen to us" (Portugal, P7); "The wealth of experiences of the participants and facilitators" (Portugal, P10).
	3.3 International perspectives, comparison between countries and networking (n = 9)	"The final seminar highlighted the situation regarding support for young cancer patients in Europe" (Estonia, P10); "I analysed the situation in Estonia and gained new contacts" (Estonia, P11); "It provided information about how things are done abroad" (Estonia, P13); "Networking, international sources" (Finland, P7); "It was interesting to see how they work in other countries" (Greece, P10); "Compare different perspectives" (Ireland, P9); "Making connections with other services working with AYA with cancer made me more aware of other resources available to my patients" (Ireland, P14); "Diversity and global networking" (Portugal, P5); "Learning about different European realities regarding the same problem" (Portugal, P5).
4. Learning design, flexibility and pedagogical resources (n = 45)	4.1 Online flexibility and self-paced learning (n = 10)	"The online format: there was no need to participate on site" (Estonia, P2); "Possibility to complete the modules at a personally suitable pace and time" (Estonia, P9); "It was possible to plan my own time" (Estonia, P14); "Possibility to plan my own study time" (Estonia, P15); "Online learning, which I could complete in my own time" (Ireland, P9); "The online part gave flexibility" (Ireland, P9); "The online format provided ease of access to the course" (Ireland, P17); "Having both synchronous and asynchronous aspects, allowing for greater flexibility" (Portugal, P3); "Autonomy and personalized pace" (Portugal, P5); "Geographical and scheduling flexibility" (Portugal, P5).
	4.2 Availability and possibility of revisiting learning materials (n = 11)	"The materials were available throughout the entire course" (Estonia, P2); "Possibility to rewatch the lectures" (Estonia, P9); "Possibility to use additional materials" (Estonia, P9); "The online materials" (Estonia, P14); "Materials easy to understand" (Estonia, P15); "It would be useful to memorize the slide sets so that you can return to what you have learned if necessary" (Finland, P2); "Access to papers and resources which I can practically use in my work" (Ireland, P3); "Recommended literature that is easy to access and understand" (Portugal, P2); "The ability to repeat videos for better understanding" (Portugal, P3); "The information provided prior to the meeting with the other trainees, so that we are all up to speed on the subject" (Portugal, P11); "The educational material was rich and interesting" (Greece, P6).
	4.3 Combination of asynchronous learning and synchronous contact sessions (n = 12)	"Logical structure, sufficient time allocated to each module, and contact seminars after each module" (Estonia, P5); "I was very satisfied with the structure of the training" (Estonia, P9); "The joint contact teaching sessions were useful" (Finland, P5); "The programme was very useful and well organised" (Greece, P5); "Working in smaller groups, keeping to time" (Greece, P8); "Asynchronous material" (Greece, P9); "Combination of online learning and reflection meetings" (Ireland, P9); "The reflection meetings helped deepen my understanding by discussing experiences and learning from others" (Ireland, P9); "I was happy with this course" (Ireland, P3); "Synchronous sessions for discussing the topics covered" (Portugal, P2); "The online symposium meeting with the other course participants for sharing knowledge and experiences" (Portugal, P11); "Synchronous sessions" (Portugal, P10).

Category	Subcategories	Codes
	4.4 Usefulness of videos, case studies and practical examples (n = 12)	"Especially, I liked the videos where the counsellor talked with the patient" (Estonia, P12); "The case descriptions and their analysis" (Estonia, P12); "Videos showing direct patient contact were useful" (Finland, P4); "Case studies" (Greece, P8); "Case study" (Greece, P9); "Case studies were good to see how to put the principles into practice" (Ireland, P6); "Presentations with voice-over made the content easier to understand" (Ireland, P9); "A good balance between theory, materials, and exercises" (Ireland, P9); "Detailed case studies when theory was put into practice" (Ireland, P11); "Practical examples adaptable to our context" (Portugal, P2); "Examples such as videos" (Portugal, P10); "The methods used for learning" (Portugal, P9).
5. Areas for strengthening pedagogical and practical delivery (n = 35)	5.1 Need for more practical examples, exercises and concrete operating models (n = 14)	"Elements of motivational interviewing or solution-focused brief therapy could be included" (Estonia, P1); "More practical examples and case-based discussions would help to better relate theory to real clinical situations" (Estonia, P7); "I would like to see more practical working methods and themes about meeting patients, as well as practical exercises" (Finland, P5); "Work on concrete things" (Finland, P7); "Adding practical tools and concrete operating models to make it easier to apply what has been learned to clinical work" (Finland, P8); "Treatment pathway models" (Finland, P8); "Opening up these models more widely" (Finland, P8); "Experiential workshop" (Greece, P4); "Divide the seminar into sections based on the time of diagnosis and talk about the corresponding interventions" (Greece, P10); "I would not spend time on so many theoretical models; I would choose one and rely on it" (Greece, P10); "The Common Sense Model of Illness" (Greece, P10); "Clearer guidance on applying concepts in clinical settings" (Ireland, P10); "Guest speakers with more practical experience" (Ireland, P14); "A nurse practitioner or another health care professional with more insight into the nuances of managing a clinical caseload" (Ireland, P17).
	5.2 Need for clearer instructions, facilitation and organisation of group work (n = 8)	"The part about preparation for the webinar could be specified more clearly" (Estonia, P3); "It would certainly have been good if the teachers had also been in the rooms when the cases were being discussed" (Finland, P3); "Someone could have been there to prepare the task a little" (Finland, P3); "The tasks/material for contact teaching were somehow unclear, so that a proper discussion could not be had" (Finland, P4); "The case studies were vague and led to difficulties in how to guide the discussion around them" (Ireland, P1); "Creating a continuous forum, Padlet, or shared online space for working on the clinical cases" (Ireland, P9); "The only aspect that fell short was in the synchronous sessions, where logistical difficulties somewhat limited the time for group activities" (Portugal, P4); "Making effective use of the time in those same sessions" (Portugal, P12).
	5.3 Need for more time for discussion, case analysis and reflection (n = 6)	"More time could be given for activities and discussion among participants" (Greece, P5); "I would either do smaller groups or allow more time so that everyone could participate" (Greece, P10); "More time for discussion and reflection" (Ireland, P10); "I wish I had more time to work on clinical cases" (Portugal, P1); "More time for synchronous classes for discussion and analysis of case studies" (Portugal, P5); "Covering the topics of each module in greater depth" (Portugal, P12).

Category	Subcategories	Codes
	5.4 Repetition, density or clarity of content (n = 7)	"The video presentations were very fast and required a lot of repetition" (Greece, P3); "The later ones were a bit repetitive and no discussion took place" (Finland, P6); "Sharpen to be clearer, eliminate repetition, perhaps less material" (Finland, P7); "The case studies were quite repetitive and breakout groups, regardless of the week, yielded the same answers" (Ireland, P5); "The online group discussions were ineffective at times, too long, not working properly and slightly repetitive" (Ireland, P12); "More clarity in some modules regarding their use" (Portugal, P10); "I felt the need for some theory to be explained by the facilitators" (Portugal, P7).
6. Accessibility, language and technical improvements (n = 22)	6.1 Translation quality and access to national-language materials (n = 9)	"The translation of the learning materials was at times difficult to understand" (Estonia, P3); "The translation of the training materials could be covered more consistently" (Estonia, P10); "More materials in Estonian" (Estonia, P11); "Better translated materials" (Estonia, P13); "More bibliography in Greek would have been useful" (Greece, P3); "The Greek translations could have been a little better in some places" (Greece, P10); "Translation of the programme's initial videos" (Portugal, P5); "Translation of available materials" (Portugal, P8); "Having the materials in Portuguese would be easier for some participants" (Portugal, P9).
	6.2 Subtitle and language clarity (n = 4)	"The subtitles were not particularly clear" (Greece, P6); "The language/terminology in parts of the presentations/questions could be simplified or restructured" (Ireland, P6); "Sometimes it was difficult to interpret" (Ireland, P6); "Especially as a non-native English speaker, hearing the explanation while viewing the slides helped me follow the information more clearly and at my own pace" (Ireland, P9).
	6.3 Technical/platform issues and access to materials in downloadable formats (n = 9)	"It was not possible to answer some of the self-check questions" (Estonia, P12); "There are still a few technical errors" (Estonia, P12); "There were maybe four people in the discussion room, two of whom had microphones that did not work" (Finland, P6); "Being able to access the videos as a PDF or a slideshow to be able to print them off" (Ireland, P6); "There was some technical issue when in the meeting room" (Ireland, P7); "Videos in PDF/Word format to make it easier to consult later and study better" (Portugal, P2); "Instead of separate videos, it would be easier to access them later for study if they were in PowerPoint/PDF format" (Portugal, P11); "At the platform level (Moodle), I feel that there were some issues in the learning process" (Portugal, P12); "The viewing of certain videos that would have been important to discuss during the online sessions" (Portugal, P12).

Category	Subcategories	Codes
7. Future format and implementation considerations (n = 26)	7.1 Hybrid or in-person components (n = 9)	"Some seminars could have been held in person" (Estonia, P15); "I would prefer it to be in person, or at least if there was this possibility" (Greece, P10); "This type of course works better when you attend in person, as you can then give it your full attention" (Ireland, P17); "If it had been held over two consecutive days in person, I think I would have found the course much more beneficial" (Ireland, P17); "I do not think it is suitable for fully online delivery" (Ireland, P18); "I think a hybrid model would be more suitable" (Ireland, P18); "There should be an in-person component prior to the course" (Portugal, P3); "Online learning loses some of the essence of sharing, group unity, and the real confrontation that occurs in person" (Portugal, P7); "In-person sharing fosters different reactions" (Portugal, P7).
	7.2 Scheduling, timing and workload management (n = 8)	"Timing: there was plenty of time to complete the course modules" (Estonia, P2); "The online seminar days could have been communicated earlier so that the work schedule could have been better arranged around the seminar" (Estonia, P14); "Group discussions could be shorter in duration" (Estonia, P8); "Longer programme duration" (Greece, P2); "I felt there was not enough time to get modules completed for the group sessions" (Ireland, P4); "Maybe just one-day training" (Ireland, P8); "Online sessions might be scheduled after normal working hours to facilitate better attendance" (Ireland, P11); "I still had to carry my work phone and answer urgent queries while logged into the online sessions" (Ireland, P17).
	7.3 Target group suitability and participant engagement (n = 9)	"Check the suitability of the target group or reduce the amount of group work" (Estonia, P4); "More participants, greater impact" (Estonia, P5); "This information is necessary for all healthcare professionals" (Estonia, P5); "Doctors who deal with oncology patients should have more knowledge" (Greece, P1); "Potentially targeting those newer to their career" (Ireland, P14); "It was difficult to tune in to the course sessions properly" (Ireland, P17); "Many people found it difficult to give the course their full attention" (Ireland, P17); "It was difficult to engage with people, particularly in the breakout groups and the role play" (Ireland, P18); "Bring the majority of trainees to the same level" (Portugal, P3).