

ORIGINAL RESEARCH

ESMO Designated Centres of Integrated Oncology and Palliative Care (ESMO DCs): education, research and programme development survey

G. Kreyc^{1,2†*}, T. Lundeb^{3†}, N. Latino⁴, M. Galotti⁴ & S. Kaasa³

¹Department of Internal Medicine II, Clinical Division of Palliative Medicine, University Hospital Krems, Krems an der Donau; ²Karl Landsteiner University of Health Sciences, Krems an der Donau, Austria; ³European Palliative Care Research Centre, Department of Oncology, Oslo University Hospital, and Institute of Clinical Medicine, University of Oslo, Oslo, Norway; ⁴European Society for Medical Oncology Head Office, Lugano, Switzerland



Available online 7 November 2022

Background: The European Society for Medical Oncology (ESMO) Designated Centres (DCs) of Integrated Oncology and Palliative Care is an incentive programme established in 2003 aiming to improve the integration of oncology and palliative care services provided by oncologists and oncology centres worldwide. Currently, the ESMO DCs programme has over 250 centres accredited from 54 countries worldwide, in all six world regions.

Materials and methods: To evaluate how ESMO can support centres to improve programme development, education and research and vice versa what each single centre can do to improve in these areas, we developed a survey which was shared with all active centres. Two hundred and seven ESMO DCs representing 44 countries were invited to participate. We used content analysis to identify response categories using a stepwise approach. After reviewing and coding all responses to each question separately, they were placed into categories, counted and labelled.

Results: Of the 207 centres that were invited to participate, 146 centres started the survey, representing 43 countries. Five overarching topics were identified. They included (i) joint events and educational activities; (ii) sharing of materials and defining common standards; (iii) sharing of experiences, scientific knowledge and expertise; (iv) research collaboration; and (v) ESMO support. Respondents were willing to support the ESMO DC community group in all topics and were also asking ESMO to support their centres in these issues in the future.

Conclusion: The study showed that the ESMO DCs are willing to provide support to improve education, research and programme development. They are also eager to contribute and collaborate amongst each other, but also request ESMO to offer advice and help to improve these issues in the DCs. In the future, facilitation of joint research projects and development of arenas to share experiences, educational and programme developments, and other resources are to be explored and could be offered to the DCs worldwide.

Key words: palliative care, ESMO Designated Centres

INTRODUCTION

The European Society for Medical Oncology (ESMO) Designated Centres (DCs) of Integrated Oncology and Palliative Care (PC) programme, a community of cancer centres providing integrated oncology and palliative care services, has been in existence for the past 19 years. The programme was established in 2003 and recognises cancer centres that provide highly integrated oncology and palliative care services.

The ESMO DCs of Integrated Oncology and PC is an incentive programme and has grown steadily over the years. The accreditation of cancer centres is an important ESMO initiative to improve the integration of oncology and palliative care services provided by oncologists and oncology centres.

To become an ESMO DC, centres need to fulfil 13 criteria, which are based on recommendations from the World Health Organization (WHO) guidelines on the provision of palliative care for patients with cancer. The 13 criteria reflect the issues of integration, credentialing, service provision, research and education. A rigorous review process is conducted by the ESMO DC Working Group (WG) who evaluate all applications from cancer centres keen to join the DC community and may perform 'ad hoc visits' to accredited centres.¹⁻³ Currently the ESMO DCs programme has over 250 centres accredited from 54 countries worldwide, in all six world regions.⁴

*Correspondence to: Dr Gudrun Kreyc, Department of Internal Medicine II, Clinical Division of Palliative Medicine, University Hospital Krems, Mitterweg 10, 3500 Krems an der Donau, Austria; Karl Landsteiner University of Health Sciences, Dr. Karl Dorrek str. 30, Krems an der Donau, Austria. Tel: +43-2732-9004-12355; +43-2732-9004-49222; +43-676-858-14-33400

E-mail: gudrun.kreyc@kreams.lknoe.at (G. Kreyc).

[†]Co-first authors.

2059-7029/© 2022 The Authors. Published by Elsevier Ltd on behalf of European Society for Medical Oncology. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

The objectives of the programme include: (i) promoting the integration of palliative care services into existing national cancer care guidelines; (ii) encouraging palliative care education and training for medical oncologists as well as other health care professionals; and (iii) expanding the cooperation between ESMO and other existing professional medical associations and organisations worldwide in supporting and sustaining palliative care development.⁵ Consequently, initiatives have been taken in policy, networking, education, public awareness and advocacy such as the dedicated sessions on palliative and supportive care at the various ESMO Congresses and meetings, a dedicated session for the ESMO DCs at the annual ESMO Congress in Europe and development of position papers on the integration of oncology and palliative care services. Additionally, two surveys were conducted to assess the availability and accessibility of opioids for cancer pain and the attitudes of medical oncologists towards the management of patients with advanced cancer.⁶⁻⁸

A further survey was undertaken to understand and study the palliative and supportive care services among the DCs community, to evaluate the impact of the application process and the accreditation. The centres reported a positive impact of being an ESMO DC on several aspects including daily work, business activity, funding for projects and on improvement of programme expansion with the development of additional services beyond those presented for the accreditation.³ Parallel findings were reported by Hui et al. in 2017 from a survey amongst 184 accredited DCs.⁹ The results showed that the 13 criteria required for the ESMO accreditation are a robust framework for integration, stimulated investment of resources into some palliative care programmes before accreditation and raised the interest about palliative care among clinicians, trainees and patients.⁹ Moreover, in 2018 indicators to assess the level of integration between oncology and palliative care were examined among the DCs using Palliative Care and Oncology Integration Indexes.¹⁰

Ten years after the first assessments, and with several following evaluation of the ESMO DCs programme, the overall appraisal is positive. Yet, in 2019, with the aim to further facilitate programme and centres development, the ESMO DCWG decided to investigate additional needs and possibilities for centres' contribution among the ESMO DCs community. The intent was to use the results to fulfil the programme's objectives, strengthen the community networking potential and reach the overall goal of improving patient-centred cancer care. In this manuscript, we describe and discuss the results of the survey conducted among the ESMO DCs.

MATERIALS AND METHODS

Development of the survey

During the DCWG meeting held in June 2019 in Lugano, the WG members highlighted the importance of understanding the needs and potential unexploited resources/contributions of the ESMO DCs to further develop the community.

After careful evaluation and discussion, it was decided to focus on three main areas of the 13 accreditation criteria: programme development, education and research. Six open-ended questions were devised and placed in the survey as detailed below:

Survey questions. Part 1: How can the ESMO DC community contribute to your organisation in order to improve in:

- Education
- Research
- Programme development

Part 2: How can you and your organisation contribute to the ESMO DC community in:

- Education
- Research
- Programme development

Distribution of the survey

The survey was developed and administered using the online tool Qualtrics. Two hundred and seven ESMO DCs representing 44 countries were invited to participate. The first invitation was sent on 23 July 2019, with reminders on 31 July 2019 and 22 August 2019 and the survey was closed on 28 August 2019. Following the ESMO Congress 2019 in Barcelona, where the preliminary results of the survey were presented during the 'Sixth ESMO Designated Centres of Integrated Oncology and Palliative Care and Awards Session—Community brainstorming on key areas',¹¹ it was decided to reopen the survey and three further reminders were sent on 21 October 2019, 6 November 2019 and 2 December 2019 and the survey was finally closed on 28 February 2020.

Analysis

The authors used content analysis and identified response categories using a stepwise approach¹² and the responses were reviewed by two of the authors (GK and TL). Each response was assigned a code describing the content in short terms. After going through and coding all responses to each question separately, the codes were placed into categories, counted and labelled.

Studying the categories more closely, the authors identified that across the questions, many of the categories were similar or related to what seemed to be the same overarching topics. Five of such overarching topics were identified and labelled accordingly.

RESULTS

Response rate and distribution of centres

Of the 207 centres that were invited to participate, 146 centres started the survey (response rate of 70.5%), representing 43 countries from five of the six world regions (based on the WHO classification): 55% were from Europe, 18% from the region of the Americas, 13% from Eastern Mediterranean, 13% from the Western Pacific and 1% from

Southeast Asia. Of these, 132 have completed the survey and their geographical distribution is reported in [Figure 1](#).

How the ESMO DC community can contribute to the centres' education, research and programme development

The respondents suggested several activities and measures for how the programme could improve the centres' education, research and programme development. The most frequently listed categories with illustrations of responses are shown in [Table 1](#).

Education ([Table 1](#)). The respondents requested arenas to share experiences, learn from each other and from experts. Workshops, symposiums, meetings, courses and other educational events were proposed. It was also suggested to develop an online system to easily collect and share materials such as publications, course programmes and links to e-learning courses. The importance of establishing common content requirements was also emphasised. Several

respondents highlighted the need for resources to participate in teaching programmes and to organise educational programmes locally or to learn from others through fellowships and exchange. They also propose to improve collaboration among centres, and are willing to contribute by hosting visitors and preceptorships, and by arranging meetings and workshops. Many expressed a need for support from ESMO in coordination, organisation and implementation of the above.

Research ([Table 1](#)). Various sorts of collaboration in clinical trials was the most frequently listed response on the question regarding research and in particular most participants suggested to start multicentre studies. An online data system or repository for various shared material was suggested for research facilitation, including the possibility of sharing protocols and data. Also, in this topic respondents requested ESMO assistance for organisation and facilitation of collaboration and networking, and for promotion of research projects. Resource improvement as an incentive for research was also mentioned.



Figure 1. Geographical distribution of the 132 centres that completed the survey.

Table 1. How can the DC community improve education, research and programme development?	
Education	
Category ^a	Illustrative responses/quotes
Meetings and seminars	<p>“Organising workshop, meetings (Centre 24)”</p> <p>“Empower us to organise a symposium (Centre 83)”</p> <p>“Regional best practices meetings (Centre 63)”</p>
Educational courses	<p>“Education and short training attachments for nurses and doctors with sponsorship if possible (Centre 9)”</p> <p>“Continuous Medical Education Programme provides to retrain the oncology staff in diverse issues (Centre 26)”</p> <p>“Through holding online educational courses and video conferences (Centre 56)”</p>
Fellowships, grants, exchange	<p>“Opportunities for fellowship (Centre 14)”</p> <p>“Facilitate development of clinical attachment programme for visitors from overseas (Centre 79)”</p> <p>“Grant promoting in palliative care-oncology integration (Centre 37)”</p> <p>“Promotion and exchange of palliative care specialist in training from developed, developing and middle-income countries (Centre 42)”</p>
Online database	<p>“Online access to journals, educational materials (Centre 10)”</p> <p>“Availability of electric library with updated research, lectures and presentations (Centre 64)”</p> <p>“Exchange of curricula concepts and teaching materials (Centre 92)”</p>
Guidelines	<p>“Gathering and spreading guidelines (Centre 23)”</p> <p>“Provision of guidelines, guideline meetings (Centre 54)”</p> <p>“To estimate a proper guideline for early integration of palliative care in oncology (Centre 97)”</p>
Curricula, programmes	<p>“ESMO curricula for training rotation of residents and fellows from the oncology department (Centre 17)”</p> <p>“Develop official standardised training programmes in palliative care at the undergraduate and postgraduate level (Centre 34)”</p> <p>“Support national educational programmes (Centre 41)”</p>
Research	
Category ^a	Illustrative responses/quotes
Multicentre studies	<p>“Facilitating relations between centres, in order to give the chance to join multicentre studies (Centre 23)”</p> <p>“Building a network on which multicentre studies and research questions are presented and initiated (Centre 123)”</p>
Links, platforms, share-points for materials and joint standards	<p>“Offering backup for data collection (Centre 106)”</p> <p>“Proposing research protocols (Centre 143)”</p> <p>“Creating a network to share database and trials (Centre 12)”</p> <p>“Distribute links to studies in palliative care (a database of studies in palliative care would be highly welcome) (Centre 59)”</p>
Promotion and collaboration by ESMO	<p>“ESMO should improve common research protocols (Centre 72)”</p> <p>“To promote research projects (Centre 45)”</p> <p>“Collaborate with EAPC during meetings (Centre 56)”</p> <p>“More active stimulation of collaboration (e.g. expert list) (Centre 58)”</p>
Improve resources	<p>“Providing a continuous stimulus to every member of the group” (Centre 86)</p> <p>“Improve resources” (Centre 19)</p>
Programme development	
Category ^a	Illustrative responses/quotes
Define structures and programmes, provide guidelines	<p>“Build a structure for integrated oncology and palliative care (Centre 47)”</p> <p>“Development of Integrated medicine system (Centre 128)”</p> <p>“Blueprint for a competitive process of selection akin to the ESMO Certification Programme in Medical Oncology (Centre 3)”</p>
Meetings	<p>“Hold an annual meeting for accredited centres to discuss the difficulties the centres face and how to improve the quality of service offered to patients (Centre 134)”</p> <p>“To organise a course about palliative care (Centre 46)”</p> <p>“Some specific sessions on palliative care should be planned during ESMO meetings (Centre 71)”</p>
Lobbying	<p>“Collaborating with health ministry and civil organisation (Centre 8)”</p> <p>“International expertise, experience sharing to improve the care (Centre 141)”</p> <p>“Grow the Designated Centre brand so that more centres sign up to and aspire to adhere to the ideals of the group (Centre 2)”</p>
Online resources	<p>“Online courses for oncologists and PC specialists (Centre 84)”</p> <p>“Set a standard of service; protocol development; web-based adviser (Centre 117)”</p> <p>“Provide a platform for disseminating and promoting the successful experience (Centre 75)”</p> <p>“Palliative care online for patients (Centre 43)”</p>
Improve quality and motivation	<p>“Building of quality indicators in order to monitor the programme development (Centre 37)”</p>
Mentor, fellowships, exchange programmes	<p>“Encourage visiting doctors to do a research project/audit at ESMO Designated Centres (Centre 1)”</p> <p>“Observership programmes for oncologists in experienced Designated Centres (Centre 29)”</p>
Multicentre trials	<p>“Multicentre studies (Centre 36)”</p>
Improve resources	<p>“Supporting innovation in PC organisation (financial and political support) (Centre 28)”</p> <p>“Support preparation for domestic guidelines (Centre 104)”</p>

EAPC, European Association for Palliative Care; ESMO, European Society for Medical Oncology; PC, palliative care.

^aMost frequent responses ranked in descending order.

Programme development (Table 1). The need for a common structure of integrated patient-centred care was expressed by many of the respondents as a way to improve programme development. Relational activities to share and learn from and together with other DCs were also frequently suggested. Meetings, special sessions, visits and observerships were among the actions proposed. Online resources such as sharing of materials were highlighted in addition to online courses. Multicentre trials were mentioned as a mean to improve programme development as well.

How each centre can contribute to the ESMO DCs community on education, research and programme development

The respondents suggested several areas where they could offer support to the DCs community on educational activities,

research and programme development. Sharing of knowledge, resources and materials was the most frequent response in addition to being willing to participate in trials.

Education (Table 2). The respondents were willing to contribute with their own knowledge and resources in a broad spectrum of activities such as teaching activities and sharing of educational developments, resources and experiences.

Research (Table 2). The most frequent response was willingness to facilitate research collaboration by participating in trials, either studies run by the centre itself, or at other centres. Additionally, many centres showed an interest in contributing to research ideas, data sharing, patient inclusion and the dissemination of project results. There were also several specific suggestions for new projects.

Table 2. How can your organisation improve education, research and programme development?	
Education	
Category ^a	Illustrative responses/quotes
Tutoring, teaching, share experiences	“Will be happy to train and teach visitors from other areas (Centre 11)” “We can share our experience (Centre 55)” “Training a large number of residents (Centre 114)”
Sharing educational resources and guidelines, online platform	“Contribute to shared learning packages online (Centre 2)” “International expertise, experience sharing to improve the care (Centre 141)” “Toolbox with learning material for nurses and doctors (Centre 58)”
Developing training programmes and curricula	“By supporting a future preceptorship on supportive and palliative medicine in the institute (Centre 3)” “Enhancing palliative care education in medical school curricula (Centre 47)”
Networking, meetings, events	“Sharing our experience with the other centres (Centre 24)” “Collaboration on educational project (Centre 116)” “Explaining our experience in meetings (Centre 31)”
Exchange of fellows, take in visitors	“Contribution to fellowship programmes (Centre 4)” “Training of fellows and other professionals (Centre 50)” “Taking ESMO exchange fellows (Centre 62)”
Research	
Category ^a	Illustrative responses/quotes
Participate in trials	“Happy to participate in international trials if available/accessible (Centre 125)” “Contribute to all stages of multicentre studies, including protocol development, patient enrolment, analysis, writing (Centre 29)”
Sharing of ideas, data, results and experiences	“Share ideas for research (Centre 137)” “Set up a specific research interest group (Centre 138)” “Uploading all published articles (Centre 64)”
Specific projects suggested	“Development of ESMO protocols on symptom management in supportive and palliative medicine (Centre 3)” “Paediatric palliative care, integration of care with oncology (Centre 44)” “Improve research in quality of death and last days of life (Centre 47)” “Individualised cancer treatment and immunotherapies (Centre 4)”
Programme development	
Category ^a	Illustrative responses/quotes
Share information	“Providing expertise, human resources, and support (Centre 18)” “Best practices can be collected and shared (Centre 93)”
Networking or collaboration with ESMO	“Participating in a working group (Centre 112)” “Participate in various ESMO clinical programme development (Centre 115)” “We would help in taking any survey or helping other centres receive their accreditation (Centre 134)”
Developing education programmes	“Participation in programmes (Centre 144)” “Training programme for doctors and nurses (Centre 78)”
Coordination of structure	“SWOT analysis and developing programme (Centre 27)” “Build a structure for integrated oncology and palliative care (Centre 47)” “Improving quality of palliative care by hospital meeting (Centre 46)”
Sharing experience	“Sharing the successful experience (Centre 75)” “Our service model serves as reference for other centres (Centre 78)” “Be advocates for the designated brand within our own country (Centre 2)”

ESMO, European Society for Medical Oncology; SWOT, strengths, weaknesses, opportunities, and threats.

^aMost frequent response categories ranked in descending order.

Programme development (Table 2). Respondents most frequently suggested that they could contribute to programme development by sharing information, experience and expertise. Collaboration by actively participating in ESMO’s projects and activities as WG, task force or committee members was proposed. Educational contributions and coordination of overarching programme development structures were also frequently suggested.

Categorisation of responses into overarching topics Five overarching topics were identified after analysing all responses and categories within programme development, education and research in both parts of the survey. The five topics included: (i) joint events and educational activities; (ii) sharing of materials and defining common standards; (iii) sharing of experiences and scientific knowledge and expertise; (iv) research collaboration; and (v) ESMO support (Figure 2). The overarching topics inform on possible measures for a more fruitful ESMO DCs community.

DISCUSSION

The ESMO DCs community offers a unique opportunity for cancer centres and cancer care providers to interact worldwide to fulfil the goal of improved integrated

oncology and palliative care services for patients with advanced cancer. This survey demonstrated that the DCs interest in and their willingness to contribute to achieve this goal by creating a more fruitful ESMO DC community are evident. Our analyses show that there are five overarching measures across the three areas of education, programme development and research, to which both the centres and/or ESMO could contribute to improve the programme.

Joint events and educational activities

Although accredited centres already provide high-quality integrated palliative care, most centres who took part in the survey reported interest in continuing education on various palliative care issues. Some centres requested support to organise educational events locally, support fellowships and exchange visitors, whilst others asked for ESMO to organise courses, meetings or online events. This is an important opportunity for professional organisations such as ESMO to contribute to improving palliative care across cancer centres worldwide. At the same time, DCs seem to hold resources one could exploit in organising educational measures: several centres were willing to teach,

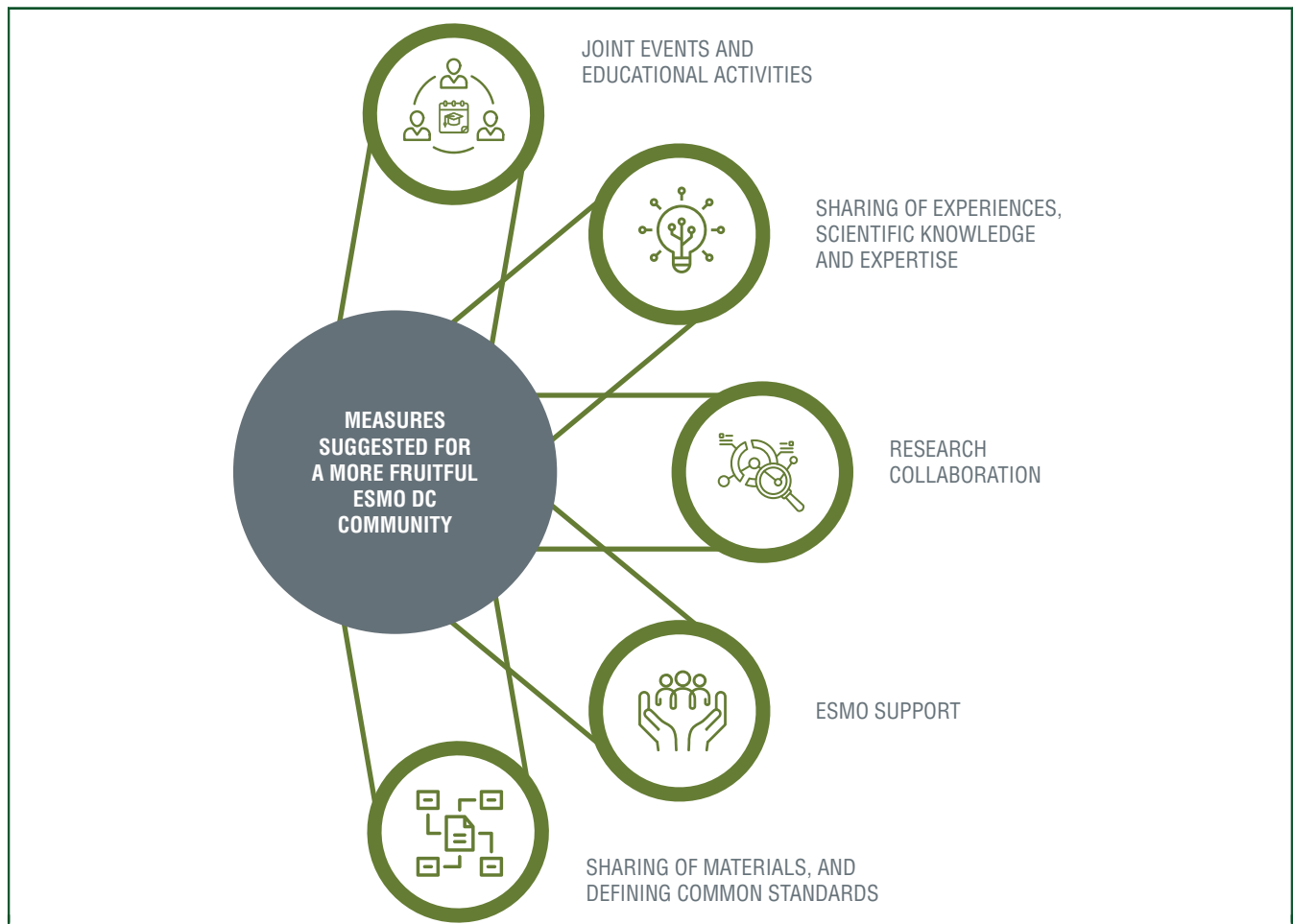


Figure 2. Overarching measures for a more fruitful ESMO DCs community. ESMO DCs, European Society for Medical Oncology Designated Centres.

invite exchange visitors or to share their educational programmes and experiences with the DCs community.

ESMO has offered its members preceptorships and advanced courses on palliative care, which comprise plenary lectures by a multidisciplinary faculty of international experts and case-based sessions (accredited with ESMO-Medical Oncologist's Recertification Approval (MORA) Continuous Medical Education (CME) points 8-16) and state-of-the art lectures, workshops and interactive discussion seminars (ESMO-MORA CME points 8-12), respectively.

Each year at ESMO Congresses (European and Asian Congress as well as ESMO Summits) there are various sessions dedicated to the topic of palliative care and in particular, at the ESMO Congress in Europe each year is held a special session dedicated to the DCs community.

Furthermore, ESMO offers PC fellowships to provide oncologists or oncology fellows additional experience in palliative care training and allowing recipients to spend a minimum of 1 month of observation or research at one of the ESMO DCs of Integrated Oncology and PC.

Sharing of materials and defining common standards

This includes developing and provisioning of guidelines, establishing official standards and creating shared learning packages. Many centres suggested establishment of an online repository and were willing to contribute with materials. The fact that centres want common standards to follow shows that there are great opportunities to improve equality in cancer care across centres and across countries, which is highly needed.^{13,14} ESMO has created a palliative and supportive care library,¹⁵ which gathers ESMO's e-learning, clinical practice guidelines, ESMO handbooks, patient guides and publications, and COVID-19 palliative care pathways which are regularly updated and freely available on the ESMO website. The library was developed after the survey and has been shared with the DCs community.

Sharing of experiences and scientific knowledge and expertise

These are activities that depend on the opportunity for centres to communicate with each other. Creating online or face-to-face arenas where centres can interact should therefore be priority. Including a chat function to an online repository could be one solution to meet respondents' needs. Today an easily accessible online resource is the ESMO DCs Facebook page, created after the survey, which is a forum to exchange knowledge and experience, and where ESMO DCs, their institute page or DCs staff can communicate and share news, information and research information on palliative care. On the page, new centres are regularly introduced through the campaign 'Introduce your Centre', launched after the survey, where the centre shares with the rest of the group a few pictures of the institute and of their typical day together with a short introduction of the services offered, of the team and a quote on why they are committed to the integration of oncology and palliative

care. However, although the group has 124 members, these are not very active and ESMO is looking on further ways to engage the community. The DC Special Session at ESMO Congresses is often followed by a cocktail party where centres can meet and discuss their experiences. Based on this survey, we think that ESMO should also organise meeting points where centres can exchange expertise and experience, such as smaller meetings or workshops. Another suggestion is to establish a teach-the-teachers programme for designated leaders among the DCs community focusing on implementation of integrated oncology and palliative care. This would improve the scientific knowledge and at the same time provide a potential networking opportunity amongst attendees.

Research collaboration

The majority of survey respondents highlighted their willingness to participate in and collaborate on multicentre studies. Moreover, many reported willingness to contribute to sharing of knowledge, experiences and resources related to research, including protocols and data. The potential of scientific collaborations of the centres appears to be very powerful. Knowing the limited size of the palliative care research community as of now, there is great potential for collaborations.^{16,17} The survey respondents asked for ways to get to know each other in order to initiate/collaborate on joint research projects, and requested external support. This is a place where ESMO can contribute.

Since the first survey conducted amongst DCs in 2010,³ the community has been invited to participate in several other surveys.⁶⁻¹⁰ Yet, our results show that the DCs still want more collaboration within research and especially in multicentre trials. ESMO can facilitate research collaboration, for example, by enabling communication between centres and by providing information on ongoing and planned projects. A feasible way to inform could be to gather ongoing projects in a dedicated ESMO DCs research website.

After the survey, in 2022 ESMO has joined the MyPath Project as an associate partner. This is a 5-year project funded by the EU's Horizon Europe Programme and which commenced on 1 September 2022. The overall objective of this European grant is to implement patient-centred care to European cancer patients, regardless of stage of disease, prognosis or place of care. The consortium will develop, program and implement electronic patient-centred care pathways that link assessment with management, and are an integrated part of the patient record systems. The implementation of these pathways will improve the quality of care, patient transitions and transfer of information across health care levels. The flexible design allows for necessary adaptations to time, place, patient groups and care needs, regardless of disease stage, socioeconomic and sex/cultural issues.

ESMO is currently involved in disseminating the information to the DCs network, looking to hold workshops to gain input on the MyPath Project.

ESMO support

To facilitate and organise the aforementioned activities and to achieve a more fruitful DC community, ESMO's support is needed. Organisation of events and activities, setting up an online platform with possibilities for interaction and promoting research projects are some of the suggested actions that are feasible using existing infrastructure and resources within ESMO, such as the aforementioned PC fellowships, dedicated Congress sessions, preceptorships and advanced courses. Following on the results of the survey, ESMO is planning to develop a 'Designated Centres Hub' where centres can share experiences and scientific knowledge and expertise, as well as material and information on the integration of oncology and palliative care services and expand the cooperation among them.

After the survey, ESMO is in the process of developing and launching the 'virtual visits programme'. The programme's objective is to strengthen the DC accreditation programme process and credibility as well as to support centres in their weaknesses and in their re-accreditation process.

The visits will include an introduction of DC clinicians and ESMO experts, a pre-recorded virtual tour of centre and its facilities, a DC team interview based on the 13 accreditation criteria, a case study presentation and conclusion and next steps. The visits will be piloted among approximately six to eight DCs selected from the six regions of the world; the selection process is still under discussion.

Additionally, to further strengthen the accreditation programme, ESMO is currently working with the members of the DCWG to revise the re-accreditation process and introduce a new checklist based on both the 13 accreditation criteria and the critical mass survey published in 2016. The aim is to avoid repetition from the first application and to gather information on how the DC has developed and/or improved following the ESMO certification. The re-accreditation application will include qualitative data, expanding on the DCs previous application, such as number of beds, staff, time to referral, etc.

This study shows that ESMO is in a position to contribute to improved education, research and programme development within the ESMO DCs community, and that many of the DCs are willing and eager to contribute and collaborate among each other. The five overarching measures that were identified could contribute to fulfil the programme's objectives. Whilst ESMO already has a wide range of offers, the main challenge might not lie in availability of resources but in its communication to the DCs community.

CONCLUSION

The DCs Accreditation Programme developed by ESMO has grown rapidly, creating a community of cancer centres providing highly integrated oncology and palliative care services worldwide. ESMO is committed to the development of cancer services across Europe and the rest of the world to meet the highest standards of cancer care, and the provision of integrated oncology and palliative care is an

integral part of that vision. This study shows that ESMO is in a position to facilitate and support improved collaborations for education, research and programme development within this community. Five measures have been proposed to help improve the DC community. Although a wide variety of ESMO programmes, resources and events are already available, these could be communicated more effectively amongst the DCs. Facilitation of joint research projects and development of arenas to share experiences, educational and programme developments and other resources should be considered. ESMO aims to make this standard of integration the norm of care rather than the exception, to ensure better patient-centred care worldwide.

ACKNOWLEDGEMENTS

The authors acknowledge the following survey respondents: Azura Rozila Ahmad, Omneya Ahmed Ibrahim Mansour, Johann Ahn, Alberto Alonso-Babarro, Mohammad Al-Shahri, Maria Angeles Arcusa, Rahul D. Arora, Gouri Shankar Bhattacharyya, Stefan Bielack, Carole Bouleuc, Oscar Breathnach, Chiara Broglia, Antonello Calderoni, Ilaria Candina, Carlos Centeno, Vittore Cereda, Luis Cirera, Alessandro Comandone, Sarah Dauchy, Jan Maree Davis, Claudio Denzlinger, Lionel D'Hondt, Omer Dizdar, Bernd Dr. Oldenkott, Maja Ebert Moltara, Evgeny Ermakov, Gaspar Esquerdo, Chun-Kai Fang, Joao Freire, Norbert Frickhofen, Isabel Galriça Neto, Sushmita Ghoshal Chakrabarti, Raffaele Giusti, Elwira Goraj, Alexandru Călin Grigorescu, Martin Gruenewald, Waleed Hamdy, Azza Hassan, David Hausner, Alet Jansen, Jayne Wood, Anjum Shabbar Joad, Rohit Joshi, Joseph Kattan, Evelien Kuip, Nicla La Verde, Roberto Labianca, Sing Hung Lo, Mari Løhmus, Erik Løhre, Gustavo López, Dominique Lossignol, Giovanna Luchena, Fausto Meriggi, Manuel Morales, Anna Mullard, Waleed Nafae, Karen Nestor, Karin Oechsle, Seamus O'Reilly, Özgür Ozyilkan, Arianna Pellegrino, Luísa Pereira, Fausto Petricola, Maria Simona Pino, Luis Pino, Graziella Pinotti, Razvan Popescu, Silvia Quadrini, Marianna Ricci, Wuilbert Rodriguez, Dulce Rodriguez Mesa, Fausto Roila, Ariana Rosiu, Rakesh Roy, Tamari Rukhadze, Mohamed Salama, Sung Ina Soong, Anna-Marie Stevens, Silvia Stragliotto, Paolo Tralongo, Ismail Hakki Necdet Uskent, Marieke van den Beuken-van Everdingen, Yvette Van der Linden, Carin Van der Rijt, Gertruud Van der Werff, Enzo Sandro Antonio Veltri, Emma Verastegui, Simon Wein, Florian Weissinger, Nikolay Yordanov, Jeanie Youngwerth, Kwok Keung Yuen. We also thank those who wished to remain anonymous.

FUNDING

None declared.

DISCLOSURE

The authors have declared no conflicts of interest.

REFERENCES

1. World Health Organization. Cancer pain relief and palliative care: report of a WHO expert committee [meeting held in Geneva from 3 to

- 10 July 1989] [Internet]. 1990. Available at <https://apps.who.int/iris/handle/10665/39524>. Accessed May 6, 2022.
2. ESMO. ESMO Designated Centres Working Group [Internet]. Available at <https://www.esmo.org/about-esmo/organisational-structure/educational-committee/designated-Centres-working-group>. Accessed May 6, 2022.
 3. Cherny N, Catane R, Schrijvers D, et al. European Society for Medical Oncology (ESMO) Program for the integration of oncology and Palliative Care: a 5-year review of the Designated Centers' incentive program. *Ann Oncol*. 2010;21(2):362-369.
 4. ESMO. ESMO Accredited Designated Centres [Internet]. Available at <https://www.esmo.org/for-patients/esmo-designated-Centres-of-integrated-oncology-palliative-care/esmo-accredited-designated-Centres>. Accessed May 6, 2022.
 5. ESMO. ESMO Designated Centres Accreditation Programme [Internet]. Available at <https://www.esmo.org/for-patients/esmo-designated-Centres-of-integrated-oncology-palliative-care/esmo-designated-Centres-accreditation-programme>. Accessed May 6, 2022.
 6. Cherny NI, Catane R. Attitudes of medical oncologists toward palliative care for patients with advanced and incurable cancer. *Cancer*. 2003;98(11):2502-2510.
 7. Cherny NI, Baselga J, de Conno F, et al. Formulary availability and regulatory barriers to accessibility of opioids for cancer pain in Europe: a report from the ESMO/EAPC Opioid Policy Initiative. *Ann Oncol*. 2010;21(3):615-626.
 8. Cherny NI, Cleary J, Scholten W, et al. The Global Opioid Policy Initiative (GOPI) project to evaluate the availability and accessibility of opioids for the management of cancer pain in Africa, Asia, Latin America and the Caribbean, and the Middle East: introduction and methodology. *Ann Oncol*. 2013;24:xi7-xi13.
 9. Hui D, Cherny N, Latino N, et al. The 'critical mass' survey of palliative care programme at ESMO designated Centres of integrated oncology and palliative care. *Ann Oncol*. 2017;28(9):2057-2066.
 10. Hui D, Cherny NI, Wu J, et al. Indicators of integration at ESMO Designated Centres of Integrated Oncology and Palliative Care. *ESMO Open* [Internet]. 2018 Jan 1;3(5). Available at [https://www.esmoopen.com/article/S2059-7029\(20\)32279-1/fulltext](https://www.esmoopen.com/article/S2059-7029(20)32279-1/fulltext). Accessed May 6, 2022.
 11. Kreye G. Designated Centres Survey: education, research, programme development - preliminary results | OncologyPRO [Internet]. ESMO Congress 2019; 2019 Sep 29. Available at <https://oncologypro.esmo.org/meeting-resources/esmo-2019-congress/Designated-Centres-Survey-education-research-programme-development-preliminary-results>. Accessed May 6, 2022.
 12. Popping R. Analyzing open-ended questions by means of text analysis procedures. *Bulletin of Sociological Methodology/Bulletin de Méthodologie Sociologique*. 2015;128(1):23-39.
 13. Reville B, Foxwell AM. The global state of palliative care—progress and challenges in cancer care. *Ann Palliat Med*. 2014;3(3):129-138.
 14. European Cancer Organisation. It Can Be Done — Beating Inequalities in Cancer Care. Action Report [Internet]. 2020. Available at <https://www.europeancancer.org/resources/164:beating-inequalities-in-cancer-care.html#:~:text=%E2%80%9CWe%20have%20seen%20that%2C%20through,Plan%2C%20measure%20and%20do!%E2%80%9D>. Accessed May 16, 2022.
 15. ESMO. ESMO Designated Centres of Integrated Oncology & Palliative Care [Internet]. Available at <https://www.esmo.org/for-patients/esmo-designated-Centres-of-integrated-oncology-palliative-care>. Accessed May 6, 2022.
 16. Larkin PJ, Murtagh F, Richardson H, et al. Collaboration: securing a future for palliative care research. 2016. *Palliat Med*. 2016;30(6):709-710.
 17. Hasson F, Nicholson E, Muldrew D, Bamidele O, Payne S, McIlpatrick S. International palliative care research priorities: a systematic review. *BMC Palliative Care*. 2020;19(1):16.