

# Perceptions of important outcomes of moral case deliberations: a qualitative study among healthcare professionals in childhood cancer care

**Charlotte Weiner**

Karolinska Institutet

**Pernilla Pergert**

Karolinska Institutet

**Bert Molewijk**

Vrije Universiteit Amsterdam

**Anders Castor**

Lunds Universitet

**Cecilia Bartholdson** (✉ [cecilia.bartholdson@ki.se](mailto:cecilia.bartholdson@ki.se))

Karolinska Institutet <https://orcid.org/0000-0001-5807-3438>

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## Research article

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# Abstract

**BACKGROUND:** In childhood cancer care, healthcare professionals must deal with several difficult moral situations in clinical practice. Previous studies show that morally difficult challenges are related to decisions on treatment limitations, infringing on the child's integrity and growing autonomy, and interprofessional conflicts. Research also shows that healthcare professionals want ethics support to help them deal with morally difficult situations. Moral case deliberations (MCDs) are one example of ethics support. The aim of this study was to describe MCD related outcomes that HCPs in childhood cancer care considered important to achieve, before MCDs were implemented, in order to support them in handling moral challenges in every day clinical practice.

**METHODS:** This study is based on qualitative data. Healthcare professionals, mostly representing registered nurses, nursing assistants and physicians, working at childhood cancer care centres in Sweden, were invited to respond to the translated and content-validated European Moral Case Deliberation questionnaire, before participating in regular MCDs. The main open-ended question included in the questionnaire was analysed according to systematic text condensation.

**RESULTS:** Data was collected from 161 responses from the healthcare professionals who were invited to participate. The responses included healthcare professionals' perceptions of which MCD-related outcomes they found important for handling moral challenges. Three different themes of important outcomes from the analysis of the data are presented as follows: *Inter-professional wellbeing*, *Being in a professional comfort zone*, and *Improved quality of care*. The themes are related to teams, individuals and care, respectively.

**CONCLUSIONS:** Healthcare professionals in childhood cancer care considered it important that ethics support could enhance the well-being of interprofessional teams, support healthcare professionals on an individual level and improve quality of care. The results of this study can be used for information in future training for MCD-facilitators. When knowing the context specific important MCD-outcomes, the sessions could be adapted. Managers in childhood cancer care would benefit from knowing about the specific important outcomes for their target group because they could then tailor the conditions. Finally, this study contributes to the reflection upon and evaluation of appropriate CESS outcomes in general.

## Background

Clinical ethics support services (CESS) involve various structural ways of supporting Health care professionals (HCPs) in dealing with moral challenges. CESS have been described as providing formal or informal support to HCPs concerning ethical issues in clinical practice regarding patient care [1]. CESS could help interprofessional teams to stimulate ethics reflection and to handle moral challenges. One example of CESS involves moral case deliberations (MCDs), also referred to as ethics case reflection rounds [2], which include systematic reflection by the interprofessional team on specific moral challenges in clinical cases [3, 4]. In MCDs a structured conversation method is deployed by a trained and certified

facilitator [5] focusing on moral issues relating to what is morally right to do and how this should be done in a right way [4].

Highly specialised childhood cancer care involves several moral challenges and complex decisions where important values are at stake [6]. In this context, advanced medical, supportive and nursing care is provided and the work environment is often described as stressful, with insufficient staffing and heavy workloads [7, 8]. Besides that, HCPs need to take into account the views of the interprofessional team, the patient and the parents, which includes involving the child in their own care [6, 9, 10].

In childhood cancer care, moral challenges faced by HCPs include infringing on the child's integrity and growing autonomy; by not telling the truth about poor prognoses, for instance, or when performing procedures against the child's will [6, 11]. Other moral challenges are due to differing views on treatment levels and in decision-making [6, 12]. Lack of interprofessional interaction and different perspectives on end-of-life care may sometimes lead to insoluble conflicts and social tensions [13], both within the team and on an individual level. Conflicting interprofessional viewpoints on what good care entails can lead to moral distress [8].

Moral distress may occur when HCPs have a sense of ethical unease as they contribute to avoidable harm when acting, not acting or deciding against their own values, on account of internal or external constraints [14-16]. Previous research demonstrates that moral distress can be reduced by strengthening HCPs' moral courage [17-19]. Furthermore moral distress can be reduced by encouraging HCPs ability to overcome fear by confronting issues that conflict with their professional values [20] and sharing negative emotions constructively within the team [21]. HCPs have expressed a need for an organisational structure enabling ethics reflection [22], which is also highlighted in a recent study in highly specialised childhood cancer care [23].

Before implementing MCDs, it is important to find out about HCPs' goals and expectations regarding MCDs, and what support and what outcomes they think is important in order to help them more specifically in handling moral challenges. Research has shown that moral challenges occurs more often in paediatric care [24]. As mentioned above, in paediatrics demanding moral challenges are involved by a triad of stakeholders including the child, family and HCPs when taking the child's best interest into account. There are few studies conducted about what outcomes MCD-participants believe might be important MCD-related outcomes in adult settings and there is a lack of research in the field of paediatrics. The new knowledge derived from this kind of research is crucial to be able to monitor, foster and evaluate implementations of MCDs in paediatric settings. Furthermore, this context specific research may also constitute a foundation for the design of future outcomes studies into paediatric CESS. Participants prior beliefs/expectations of what outcomes are important with MCD are important in order to ensure, understand and develop existing CESS. Therefore, this study was initiated, using the answers to one central, open-ended question in the European Moral Case Deliberation (Euro-MCD) Outcomes Instrument [25].

The aim of this study was to describe MCD related outcomes that HCPs in childhood cancer care considered important to achieve, before MCDs were implemented, in order to support them in handling moral challenges in every day clinical practice.

## Methods And Design

This is a descriptive study based on a qualitative systematic analysis of written answers from the open-ended question included in the Euro-MCD [25].

### Data collection

Data were collected between September and December 2017 using a printed paper-and-pencil questionnaire. Most of the responses were quite detailed, only a few responses consisted of single words. Participants wrote, in a descriptive way, about important outcomes that they wanted to achieve. Outcomes are in this study defined as effects occurring because of MCDs and that could be achieved both during and after the MCDs.

### *The Euro-MCD instrument*

The Euro-MCD is a multi-item instrument that have been translated and culturally adapted to Swedish, Norwegian and Dutch from the original English version [25]. The instrument contains an open-ended question and 26 predefined specific items representing various MCD outcomes. Participants are asked not to read the predefined items before answering the open-ended question. The Euro-MCD consists of two parts; the first to be answered prior to participation in MCDs, and the second to be answered after actual participation in MCDs [25]. This study is based on answers to the open-ended question in the first part *prior* to participation in MCDs. The open-ended question was worded as follows: "Imagine participating in MCDs. Please formulate in your own words 3 to 5 outcomes that you consider important to reach in order to support you and your co-workers in handling moral challenges in everyday clinical practice".

### Study participants

National training of facilitators (N=15) of MCDs had recently been conducted, involving professionals from all six paediatric cancer centres in Sweden. The plan was that facilitator-trainees were to implement MCDs at their centres after the training. The facilitator trainees assisted the research group with data collection for this study before implementing the structured MCDs. HCPs (n=275) who worked clinically with childhood cancer patients and were presumptive participants in the upcoming MCDs were invited to participate in the study.

### Data analysis

The handwritten answers were transcribed to digital documents by the first and last authors with

Loading [MathJax]/jax/output/CommonHTML/jax.js ysis was inspired by Malterud's (2012) modified systematic

text condensation and included continuous self-reflection with regard to personal preconceptions about the data. According to Malterud [26], systematic text condensation is a method for qualitative analysis of data established from traditions shared by several methods for qualitative analysis. While sustaining an accountable level of methodological rigidity, this methodology offers the researcher a process of feasibility, reflexivity and intersubjectivity [26]. The analysis was performed gradually over four phases: overall impression, identification of meaning units, abstraction of the content and text summarising [26]. In the first phase, overall impression, data were read repeatedly, carefully and reflectively, maintaining an open mind [26, 27]. This provided an idea of what the data entailed, and preliminary themes were written down. In the second phase, identification of meaning units, data were divided into meaning units. A manual analysis was performed; the meaning units were separated and coded to form preliminary themes. Meaning units and themes were compared with each other. The process also involved exclusion of unclear text i.e. where only one word was written [26]. Thereafter, a deeper analysis was performed in the third phase, abstraction of the text content, as the themes were given names describing what the meaning units meant. For example, the meaning unit “A [care] plan for the patient that all HCPs work towards” was coded to the preliminary subtheme “A common care plan”. In phase four, text content summarising, subthemes and quotations were translated from Swedish to English and the emerging themes and results were summarised and finalised by assessing the findings in relation to the transcripts as a whole [26]. The themes and subthemes were discussed throughout with all co-authors in relation to the data.

## Findings

The participants represented eight different professions: physician, registered nurse, nursing assistant, priest, psychologist, social worker, sibling supporter and hospital play therapist. Responses were received from 185 out of 275 questionnaires distributed, representing a response rate of 67%. Of the 185 questionnaires returned, 161 included answers to the open question.

The results will be presented in themes and subthemes. The themes include: *Interprofessional well-being* on a team level; *Reaching a professional comfort zone*, on a personal level; and *Improved quality of care* on a care level. Themes and subthemes are presented below (table 1), and quotations are used to exemplify the subthemes.

Table 1. Overview of themes and subthemes

Themes	Subthemes
Interprofessional well-being	Interprofessional understanding
	Interprofessional decision-making
	Permissive dialogue
	Being confirmed
Reaching a professional comfort zone	Moral and practical competence
	Self-awareness and coping
	Moral courage and confidence
Improved quality of care	Understanding of the family situation
	A common care plan
	Supportive care to the child and family

## Interprofessional well-being

Participants described how MCDs could promote outcomes related to interprofessional well-being. Well-being is the condition of the interprofessional team, meaning positive interactions and atmosphere. Well-being includes four subthemes: *Interprofessional understanding*; *Interprofessional decision-making*; *Permissive dialogue*; and *Being confirmed*.

### *Interprofessional understanding*

This subtheme includes *increased* mutual understanding within the interprofessional team. HCPs described that understanding was an important outcome that could be achieved by sharing perspectives, as well as receiving views and opinions of others.

*“Increased understanding between individuals” (Registered Nurse)*

Some participants emphasised the importance of a coherent view among co-workers that could promote a peaceful and safe interprofessional team. Not only was interprofessional understanding important but also interprofessional decision-making to achieve interprofessional well-being.

### *Interprofessional decision-making*

In this study, participants stated that one important outcome was to enhance their knowledge of specific facts, such as medical care and the family situation, helping to facilitate the team’s decision-making and consensus. It was important to be able to discuss the pros and cons of choices of action.

*“A place where we can discuss with each other and come to a decision” (Registered Nurse)*

Moreover, interprofessional decision making included ensuring that the same information and a common overview of the situation were available to all members of the team. Several participants stated that they expect to agree on how to deal with moral challenges and find well-founded solutions.

*“Safer decision-making that the majority agrees on” (Registered Nurse)*

*“Well founded decisions in difficult situations” (Physician)*

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Besides the importance of enabled interprofessional decisions, HCPs stated the importance of permissive team dialogue.

### ***Permissive dialogue***

HCPs in this study described the importance of facilitating “free space” where different perspectives, problems and opinions could be aired openly as an outcome in relation to MCDs. This included allowing everyone to have their say, with the same rights and opportunities to express themselves within the team.

*“An open, permissive conversational climate” (Registered Nurse)*

*“Open discussion where everyone can have a say” (Physician)*

Several participants described a desire for the team to tolerate, respect and accept the reasoning of others and to understand people’s different approaches.

*“To be able to discuss and voice the thoughts arising in ethically difficult situations” (Registered Nurse)*

Furthermore, participants expected to encounter an environment in which no-one was judged, and where they could be confirmed.

### ***Being confirmed***

Participants emphatically described being confirmed as an important MCD-related outcome, allowing them to handle moral challenges in respect of care. Being confirmed meant feeling that their own thoughts and opinions were accepted by the team and that their perceived feelings, opinions and thoughts were not considered strange. In the words of one participant:

*“Confirmation that you are thinking along the right lines” (Registered Nurse)*

Confirmation of their reasoning was considered to be an important outcome, generating a sense of security regarding what was ethically right or wrong in a specific situation. Another important aspect of confirmation was about feedback on how previous situations should have been handled, or that a case was in fact “ethically challenging”.

**Reaching a professional comfort zone** Reaching a professional comfort zone means expanding feelings of being comfortable and confident and limits feelings of anxiety. Reaching a professional comfort zone includes three subthemes: *Moral and practical competence; Self-awareness and coping; Moral courage and confidence.*

### ***Moral and practical competence***

Increased moral and practical competence were viewed as expected important outcomes. Moral competence includes to broaden the moral reasoning and an empathic ability. Practical competence challenges and facilitating a professional approach.

Participants found it important to develop analytical reasoning and to evaluate as well as prioritise different ethical principles regarding treatment alternatives. Another aspect involved development of creative reflection, that participants stated could potentially bring new perspectives and thoughts on moral challenges. Essentially, participants found it important to gain an understanding of the complexity of moral challenges. Moral and practical competence were also referred to as the ability to quickly and easily understand, whether a situation involves a moral challenge and identify the essence of what is actually difficult on a *moral* level.

“An enhanced ability to discern different aspects of moral dilemmas. Enhanced understanding of other perspectives in respect of moral reasoning” (Physician)

Besides moral competence, practical competence was also considered important. Knowing how to do things, but also knowing how similar situations should be handled in specific terms, such as what information to convey to the child and their family. It was also important to be able to deal with crises and demanding situations such as death and poor prognoses.

*“Better equipped and more tools to handle ethically difficult situations” (Registered Nurse)*

“Enhanced security in our profession. Broaden my expertise and increase preparation for potential scenarios in the care of our patients” (Registered Nurse).

Self-awareness and coping were also important MCD-outcomes to reach a professional comfort zone.

### ***Self-awareness and coping***

Participants expected MCDs to potentially lead to greater self-awareness. HCPs considered it important to improve their ability to understand themselves and their own opinions and perspectives, and to be aware of *“why I do what I do”*.

“Understanding your own reactions and the reactions of others, greater self-awareness, greater acceptance of your own resources and abilities...” (Registered Nurse).

It was important for participants to find peace of mind when decisions were made in challenging cases, even if such decisions were perceived to be unsatisfying. Moreover, participants referred to important outcomes that were related to self-control; improving their own deliberations before making decisions on situations, for instance.

Coping with moral challenges was considered to be an important outcome and was described as being able to handle and reduce feelings of inadequacy and moral distress. *“Reducing moral distress” (Nursing Assistant)*. Several participants indicated that MCDs that were organised and planned could reduce stress in challenging situations.

*“Reducing stress in relation to complex ethical conflicts; for myself, and within the professional team”*

Minimising challenging thoughts after work was also described as an important outcome by participants, helping them to cope, because the moral challenge has already been dealt with in the MCDs. HCPs also expressed that they felt it was important to develop moral courage and confidence.

### ***Moral courage and confidence***

There was an expectation that participating in MCDs could increase moral courage, both when caring for children and their families and when communicating within the team. Participants described moral courage as being brave and confident enough to speak up and support others to also express their opinions on moral grounds, and to dare to argue in favour of them despite other HCPs' values and opinions.

*"Giving me greater strength and supporting others to dare to express ethical considerations and possibly 'differing opinions'" (Physician)*

Participants declared that sharing their own and other HCPs' experiences, thoughts and feelings in MCDs was a way of potentially enhancing self-confidence. Participants also said it was important to develop the courage and confidence to talk about difficult situations such as treatment levels, palliative care and the perspectives of the family and child.

*"Being braver to handle different situations" (Registered Nurse)*

It was about to venture to spend time with the child and their family in their vulnerable situation, and to be able to handle the family's feelings of shock when they are told of a poor prognosis or death.

### **Improved quality of care**

Participants described how MCDs could promote improved quality of care, which includes three subthemes: *Understanding of the family situation; A common care plan; Supportive care for the child and family.*

#### ***Understanding of the family situation***

HCPs described achieving a deeper understanding of the family situation when caring for a child with cancer, as an important outcome. Understanding the family included increased respect for different opinions from families and being more willing to view the child in relation to their family.

*"Greater understanding of how a child's difficult situation affects the child's own family" (Registered Nurse)*

This also relates to opportunities to understand differences in families, described by one nursing assistant as *"seeing who you have in front of you"*. Developing a better understanding of the child and their family situation was also a way of taking the best interests of the child and the family into account.

This included enhancing the rights of the child in their specific situation. Moreover, it was considered important for the team to develop a common care plan that the family also agreed with.

### ***A common care plan***

HCPs stated that one important outcome was to, together with the family, generate a distinct common care plan for the child which included what was best for the child.

“Ensuring that both the HCPs and the family feel the decisions made are right for the child” (Registered nurse)

“Better care, with more thought going into it” (Registered Nurse)

Other aspects involved maintaining good care for the child and their family, adhering to the care plan drawn up and facilitating the follow-up and evaluation of previous care initiatives.

*“Follow-up and evaluation of our choices and actions” (Registered Nurse)*

Some participants felt it was important that MCDs create a possibility for HCPs to be capable of planning for continuity of care, allowing the same HCPs to care for the child and their family. Participants also considered that supportive care could lead to improved quality of care.

### ***Supportive care for the child and family***

HCPs described to provide better support for both the child and their family as another important outcome of MCDs. Being supportive was expressed as the opportunity to provide the child and their family with good, secure care, and particularly improving the care for families in crisis.

“Better care for families who are in shock” (Registered Nurse)

“Better care and support for the family” (Registered Nurse)

Comforting and listening to the family, talking about difficult situations and moral challenges were also important outcomes of MCDs. Other important outcomes were the ability to prepare the child and their family for future care initiatives, as well as knowing when and how to perform caring procedures. Supportive care also includes being better prepared for problematic relationships in care situations, such as consideration of how the family in question should be treated.

## **Discussion**

This study involves MCD-related outcomes, described by HCPs', important for handling moral challenges. HCPs answered an open-ended question before participating in regular MCDs in childhood cancer care. Three different important outcomes are presented as: *Interprofessional wellbeing, Reaching a professional comfort zone and Improved quality of care*. These themes relate to the team, the individual

professional and the care, respectively. In the following section highlighted results are discussed and compared with existing literature on CESS outcomes. A study by Dauwerse et al. (2013) shows that participants thought that CESS goals included encouraging a moral climate, as well as developing professionalism and good care [28], which is comparable with themes presented in our study.

Moreover, one could suggest that the findings from a Dutch study designed in a comparable way [29] described themes both similar and different to those in this study. The authors of that study present *Beerteamwork* or *k' ∈ clud ∈ gimp* or *tantoutcomeslike* 'More open communication' and 'Better mutual understanding' in a similar manner to our theme: *Interprofessional well-being* including *Permissive dialogue* and *Interprofessional understanding*. They also present the theme *Beerdeal ∈ gwiththeethicallyd ⇔ ictsituation'* and 'Becoming a better professional' in a similar way to our subthemes *Interprofessional decision-making* and *Moral and practical competence* in this study. Finally, they present 'Improving quality of care' which is very similar to the *Improved quality of care* theme in this study. However, even though they describe enhanced competence, they do not describe aspects of *Reaching a professional comfort zone* as presented in this present study.

Furthermore, in our study, interprofessional well-being includes outcomes aimed at interprofessional understanding, and with this a stronger sense of security in the team. In previous research on CESS outcomes, HCPs acknowledge that dealing with interprofessional uncertainty and different viewpoints within MCDs can promote interprofessional understanding, leading to reduction of conflicts in care initiatives [13, 23]; and in turn, this may help to enhance the sense of security. It is important to consider that the request for a sense of security could be related to culture and may differ between contexts and countries.

Continually, the results of this study indicate that there could be a need for improved teamwork. The importance of interprofessional teamwork has also been highlighted in previous CESS research [23, 29-31]. One possible reason for the recurring focus on interprofessional teamwork, in paediatrics, as an outcome of MCDs is that the potentially stressful paediatric healthcare environment could constitute a barrier to teamwork. MCDs for interprofessional team reflection will be implemented after this study, so it will be interesting to see whether there is any change to the importance and experience of the quality of interprofessional teamwork.

In this study, *being confirmed* were perceived as an important outcome of MCDs for participants. *Being confirmed* meant that participants thoughts and opinions were respected by the interprofessional team. The results of a study into reflective teams and supervision in healthcare indicate that if the team maintains an open atmosphere, moral judgements can be avoided, and internal demands can be replaced by confirmation [32]. Friberg et al (2016) suggest that when HCPs are not confirmed by each other, there is a risk of feeling uncertain, experiencing a lack of confidence and increased feelings of doubt in their own profession [33]. Our and another study evaluating CESS could be interpreted that being confirmed is needed in order to develop confidence, which in turn is needed in order to handle uncertainty and doubt.

Loading [MathJax]/jax/output/CommonHTML/jax.js es in paediatrics show that feelings of uncertainty are all part

of daily life [34]; or, more precisely, that moral uncertainty is an inherent part of working in paediatrics. This is why learning to handle moral uncertainty is an important element in being professional and dealing with moral challenges. This raises the question as to the extent to which MCDs should contribute to confirm HCPs in order to reduce their feelings of moral uncertainty and insecurity? Or whether MCDs should try to help HCPs cope more effectively with the inherent moral uncertainty of working in paediatric oncology? Given the results in this study, it is even possible to argue in favour of the beneficial outcomes of both.

Developing moral courage was perceived as an important MCD-related outcome and is thematized in the analyses as part of reaching a professional comfort zone. It could be discussed that feelings of professional uncertainty might result in vulnerability in care-actions and in the interprofessional team, in the sense that HCPs underestimate themselves and feel unprofessional. Vulnerability is related to courage: being uncertain and asking for help is an example of a situation in which we feel vulnerable and require courage [35]. A study by Thorup et al. (2012) shows that nurses' experiences of the vulnerability of themselves and their patients increased their sense of courage with regard to healthcare actions [36]. Furthermore, courage and vulnerability may affect all relationships; particularly in care and interprofessional relationships in paediatric oncology, where HCPs are exposed to emotionally difficult situations on a daily basis. It may be claimed that if HCPs have the ability to acknowledge vulnerability and feel courageous, this makes them more able to cope with the emotionally difficult situations arising from relationships with the recipients of care. One challenging question involves how HCPs could express their vulnerability and share the experience with their interprofessional team during MCDs, particularly when these MCDs take place in sometimes quite hierarchical healthcare teams [37, 38]. A more methodological question is what HCPs really meant when they expressed, they found it important to develop courage; could they have meant developing confidence? In the literature, being courageous is described as a virtue and a characteristic that is associated with a moral approach that preserves the patient's dignity by considering ethical values such as respect and responsibility [39, 40]. It would be interesting to deeper explore the meaning of moral courage in MCDs, and to study whether developing moral courage is enhanced further by participation in MCDs.

Improved quality of care includes understanding the child's specific situation and needs. Previous research into barriers for clarifying perspectives in MCDs highlights the fact that failing to fully understand the child's current situation poses a risk of failing to observe the viewpoints of the patient and their family [38]. The fact that participants in this study found it important for MCDs to lead to outcomes improving the quality of paediatric oncology care, including patient safety, needs further exploration. For example, if MCDs help to enhance teamwork, this might reduce the risk of medical errors being made [41]. Other evaluation studies do indeed seem to suggest that CESS improves the quality of care [42, 43], yet few studies show whether this is actually the case and what specific CESS outcomes actually contribute to quality of care, and in what way [44, 45]. Participants did not express paediatric specific data. Even if the HCPs in paediatric are facing moral challenges, like complex situations with decision-making involving children's growing autonomy and many stakeholders [24, 11, 6], potential differences in moral

Loading [MathJax]/jax/output/CommonHTML/jax.js are scarce – for instance, also in adult medicine there are

plenty of situations where the adult patient is not autonomous (because they are confused, in shock, severely ill, unconscious, suffering from dementia etc) and you have a triad of patient, relatives and HCPs [46-48]. One could argue that it is difficult to identify moral dilemmas in pediatrics that in no circumstances can arise also in adult care. It would be very interesting to explore this further by holding in-depth interviews with HCPs who have participated in MCDs, for example, questioning them on their perceptions of the impact of MCDs on quality of childhood cancer care.

### Limitations and strengths of this study

One possible limitation of this study relates to the fact that although systematic text condensation was considered to be an appropriate method for short written answers where one is close to the text in the analysis [26], the open question design resulted in some very short answers. This made those few participants' answers difficult to analyse and interpret (such as what was meant by the word 'professionalism'). It would have been interesting to be able to follow up on what participants meant by their short answers by holding interviews or running focus groups.

One interesting aspect is how participants interpreted the open-ended question. Sometimes the answers were perceived to be about MCD-outcomes achieved during MCDs and sometimes after. Different interpretations of the open-ended question have also been found in the Dutch study [29]. However, we would argue that regardless what participants were aiming for (during or after) the described outcomes are valuable to handle moral challenges in paediatric clinical practice.

One strength of this study is investigator triangulation, where different researchers [26] worked together to create a broad analytical space and contributed to bring about enhanced insight [26]. This triangulation is also an appropriate method for validating the research process, and it minimises the risk of misinterpretation and possible bias (Polit & Beck, 2017). Another strength is that this is a national study involving all childhood cancer care centres, including different professional groups, with a satisfactory response rate of almost 60%. Finally, the relevance of this data are high, given the fact that there will be follow-up evaluation research at all these centres, using the Euro-MCD instrument (part II), making it possible to compare the results of this study with future evaluation studies.

## Conclusions

Before implementing MCDs, it is important to know what outcomes from MCDs are considered important. HCPs working with childhood cancer care in Sweden declared which outcomes of MCDs they found important, with no explicitly declared internal hierarchy, prior to their participation in MCDs. Themes of important outcomes were; *Interprofessional well-being*, *Reaching a professional comfort zone* and *Improved quality of care* which indicates that HCPs have great trust in MCDs. One particular interesting finding was the fact that HCPs stressed the importance of MCDs-related outcomes referring to feeling secure, brave and confirmed. The results of this study can be used for information in future training for facilitators of MCDs in childhood cancer care. Facilitator training could be adapted, Loading [MathJax]/jax/output/CommonHTML/jax.js t MCD-outcomes. Managers would benefit from knowing

about the specific important outcomes for their target group because they could then tailor the conditions. Finally, this study contributes to the reflection upon and evaluation of appropriate CESS outcomes in general.

## Declarations

### Ethics approval and consent to participate

Participants were given written information about the study. An information letter describing the purpose of the study, the voluntary nature of participation and confidentiality was attached to the questionnaires. Completing and returning the questionnaire meant that consent was assumed. The Regional Ethical Review Board in Stockholm had no objections to the study (no. 2017/1447–31).

### Consent for publication

Not applicable.

### Availability of data and material

The datasets used and/or analysed during the current study are available from the corresponding author on reasonable request.

### Competing interests

The authors declare that they have no competing interests.

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### Authors' contributions

The idea for the research was devised by PP, CB and BM. CB collected and read all the data. CW performed most of the analysis; all authors discussed and commented on the themes and subthemes. CW drafted the manuscript in close collaboration with CB. All authors participated throughout the process by reading, revising and commenting on the manuscript. All authors approved the final manuscript prior to publication.

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# Abbreviations

CESS: Clinical ethics support services

HCP: Healthcare professional

MCD: Moral case deliberation

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