# REPORTS OF ORIGINAL INVESTIGATIONS





# Impact of COVID-19-related restricted family presence policies on Canadian pediatric intensive care unit clinicians: a qualitative study

Impact des politiques de restriction de la présence familiale liées à la COVID-19 sur les clinicien nes des unités de soins intensifs pédiatriques au Canada : une étude qualitative

Molly J. Ryan, MPH · Laurie Lee, NP, MN · Sara Drisdelle, MSc · Daniel Garros, MD · Jamie A. Seabrook, PhD · Janet Curran, RN, PhD · Jacqueline Bretzler, MHSc · Corey Slumkoski, PhD · Martha Walls, PhD · Laura Betts, MHS · Stacy Burgess, MHA · Jennifer R. Foster, MD ©

Received: 21 July 2023/Revised: 19 December 2023/Accepted: 19 December 2023 © The Author(s) 2024

#### **Abstract**

**Purpose** Pediatric intensive care units (PICUs) worldwide restricted family presence in response to the COVID-19 pandemic. We aimed to explore the experiences and impact of restricted family presence policies on Canadian PICU clinicians.

Methods We conducted a qualitative study that followed an interpretive phenomenological design. Participants were PICU clinicians providing direct patient care in Canada during periods of COVID-19-related restricted family presence. We purposively sampled for maximum variation among survey participants who consented to be contacted for further research on the same topic. In-depth interviews were conducted remotely via telephone or

**Supplementary Information** The online version contains supplementary material available at https://doi.org/10.1007/s12630-024-02742-0.

M. J. Ryan, MPH  $\cdot$  S. Drisdelle, MSc  $\cdot$  J. Bretzler, MHSc  $\cdot$  L. Betts, MHS  $\cdot$  S. Burgess, MHA Department of Pediatric Critical Care, IWK Health, Halifax, NS, Canada

L. Lee, NP, MN Department of Pediatrics, Cumming School of Medicine, University of Calgary, Calgary, AB, Canada

Faculty of Nursing, University of Calgary, Calgary, AB, Canada

D. Garros, MD Stollery Children's Hospital, Edmonton, AB, Canada

Published online: 20 March 2024

Division of Critical Care Medicine, Department of Pediatrics, University of Alberta, Edmonton, AB, Canada video-call, audio-recorded, and transcribed. Interviews were inductively coded and underwent thematic analysis. Proposed themes were member-checked by interviewees.

Results Sixteen PICU clinicians completed interviews. Interviewees practiced across Canada, represented a range of disciplines (eight nurses, two physicians, two respiratory therapists, two child life specialists, two social workers) and years in profession (0–34 years). We identified four themes representing the most meaningful aspects of restricted family presence for participants: 1) balancing infection control and family presence; 2) feeling disempowered by hospital and policy-making hierarchies; 3) empathizing with family trauma; and 4) navigating threats to the therapeutic relationship.

Conclusion Pediatric intensive care unit clinicians were impacted by restricted family presence policies during the COVID-19 pandemic. These policies contributed to feelings of disempowerment and challenged clinicians' perceived ability to provide the best family-centred care possible. Frontline expertise should be incorporated into

J. A. Seabrook, PhD School of Food and Nutritional Sciences, Brescia University College, London, ON, Canada

Department of Pediatrics, Western University, London, ON, Canada

Department of Epidemiology and Biostatistics, Western University, London, ON, Canada

Children's Health Research Institute, London, ON, Canada



the design and implementation of policies to best support family-centred care in any context and minimize risks of moral distress for PICU clinicians.

#### Résumé

**Objectif** Les unités de soins intensifs pédiatriques (USIP) du monde entier ont restreint la présence des familles en réponse à la la pandémie de COVID-19. Notre objectif était d'explorer les expériences et l'impact des politiques de restriction de la présence familiale sur les clinicien·nes des USIP canadiennes.

Méthode Nous avons mené une étude qualitative qui a suivi un plan phénoménologique interprétatif. Les participant es étaient des clinicien nes des USIP qui dispensaient des soins directs aux patient es au Canada pendant les périodes de présence restreinte des familles en raison de la COVID-19. Nous avons délibérément échantillonné pour obtenir une variation maximale parmi les participant es à l'enquête qui ont accepté d'être contacté es pour d'autres recherches sur le même sujet. Des entretiens approfondis ont été menés à distance par téléphone ou par appel vidéo, enregistrés et transcrits. Les entretiens ont été codés de manière inductive et ont fait l'objet d'une analyse thématique. Les thèmes proposés ont été contrôlés par membre par les personnes interrogées.

Résultats Seize cliniciennes et cliniciens des USIP ont passé des entrevues. Les personnes interrogées exerçaient partout au Canada, représentaient un éventail de disciplines (huit infirmiers et infirmières, deux médecins, deux inhalothérapeutes, deux spécialistes du milieu de l'enfant, deux travailleuses et travailleurs sociaux) et d'années d'expérience professionnelle (de 0 à 34 ans). Nous avons identifié quatre thèmes représentant les aspects les plus significatifs de la présence restreinte de la famille pour les participant·es : 1) l'équilibre entre la prévention des infections et la présence de la famille; 2) le sentiment d'être dépossédé·e par les hiérarchies de l'hôpital et de ne pas pouvoir participer à l'élaboration des politiques; 3) le sentiment d'empathie à l'égard des traumatismes

J. Curran, RN, PhD School of Nursing, Faculty of Health, Dalhousie University, Halifax, NS, Canada

C. Slumkoski, PhD · M. Walls, PhD Patient Partner, Department of Pediatric Critical Care, IWK Health, Halifax, Canada

J. R. Foster, MD ( $\boxtimes$ ) Department of Critical Care, Dalhousie University, Halifax, NS, Canada

Department of Pediatric Critical Care, IWK Health, 5850/5980 University Avenue, Halifax, NS B3K 6R8, Canada e-mail: jennifer.foster@iwk.nshealth.ca



familiaux; et 4) la réponse aux menaces qui ont pesé sur la relation thérapeutique.

Conclusion Les cliniciens et cliniciennes des unités de soins intensifs pédiatriques ont été touché·es par les politiques de restriction de la présence familiale pendant la pandémie de COVID-19. Ces politiques ont contribué à un sentiment d'impuissance et ont remis en question la capacité perçue des équipes à fournir les meilleurs soins possibles axés sur la famille. L'expertise de première ligne devrait être intégrée à la conception et à la mise en œuvre des politiques afin de mieux soutenir les soins axés sur la famille dans n'importe quel contexte et de minimiser les risques de détresse morale pour les cliniciennes et cliniciens des USIP.

## Keywords COVID-19 ·

COVID-19 prevention and control  $\cdot$  health care personnel  $\cdot$  pediatric critical care  $\cdot$  visitors to patients

The pediatric intensive care unit (PICU) is a high-stress environment where the majority of in-hospital pediatric deaths occur. Working in this context, critical care clinicians face well-documented risks of burn-out, amoral distress, and compassion fatigue. External pressures, such as the COVID-19 pandemic, can excaberate these risks. Given current challenges with retention and burnout in critical care, developing a holistic understanding of clinicians lived experiences at work can help policy-makers better address underlying challenges and structural contributors.

Prior to the COVID-19 pandemic, most Canadian PICUs had adopted values and practices consistent with family-centred care (FCC). All patients could access at least two primary caregivers 24/7, nonparent family members including siblings could be at the bedside with variable frequency, and family members were encouraged to participate in patient care rounds. For clinicians who understand and practice FCC values, policies that impede family members' access to critically ill children pose risks such as moral distress. 5,6

In response to COVID-19, inpatient units across the globe restricted family presence. <sup>19,20</sup> In Canada, many adult intensive care units (ICU) prohibited all family presence. <sup>21</sup> While PICUs allowed at least one caregiver, <sup>16</sup> this was a significant reduction from usual practice. Researchers and clinicians have sought to understand the impact and efficacy of restricted family presence (RFP) policies in ICUs. <sup>19,20,22–32</sup> Clear impacts have been shown for clinician mental health <sup>20,23,29</sup> and unit morale <sup>29</sup> within adult ICUs. While pediatrics did not experience the influx of COVID-19 cases seen in adult populations, novel situations associated with a lone caregiver and obtaining exceptions to restrictions for families introduced other sources of stress. <sup>16,23,33</sup> To date, few studies have

specifically addressed PICU clinician experiences and impacts associated with RFP. 23,33-35 Therefore, we designed this study to understand how PICU clinicians were impacted by RFP policies. 36

### Methods

Study design

Following ethics approval from the University of Alberta Research Ethics Board (Edmonton, AB, Canada; REB #Pro00104410, September 2020), we conducted a qualitative study that followed an interpretive phenomenological design. We report the findings according to the Consolidated Criteria for Reporting Qualitative Studies reporting guidelines<sup>37</sup> (Electronic Supplementary Material [ESM] eAppendix 1).

At its core, phenomenology argues that individuals' lived experiences have value and are worthy of scientific study. <sup>36</sup> Interpretive phenomenology involves interpreting potential meanings from these lived experiences that may or may not be known to the research participants themselves. <sup>36</sup> Accordingly, the interpretive phenomenologist typically comes with relevant expertise and prior knowledge.

Reflexivity is a core tenet of qualitative research.<sup>38</sup> The interviewers and analysis team members were early-to-mid career, cisgender White women living and working on unceded Indigenous land in Canada. The study leads were motivated to pursue this work based on first-hand experiences with RFP policies in their PICUs (pediatric intensivists: J. F., D. G.; PICU nurse practitioner: L. L.). This motivation could bring bias that RFP caused harm. One analysis team member had first-person experience as a parent of a hospitalized child and reflected that their experiences may have biased them against restrictions and to empathize with health care professionals having to implement the restrictions. These biases were mitigated by having the primary coders bring different perspectives (qualitative research, public health: M. R.; qualitative research, rehabilitation sciences: S. D.) to challenge assumptions that may be coming from their own experiences rather than the interviewees, as well as member-checking throughout the data collection and analysis. Participants knew the interviewer was a research coordinator with qualitative training and experience (M. R.), or a PICU nurse who had recently received interview training (J. B.). Participants had no prior relationship with either interviewer.

Participant sampling and recruitment

Participants were recruited from respondents to a survey of clinicians who worked in a Canadian PICU during periods of RFP who had agreed to be contacted for future studies (N=27). We purposively sampled this group of 27 clinicians for maximum variation along the following characteristics: profession; region of practice; years of practice; gender; and self-identification as Black, Indigenous, and/or a person of colour. Between May and November 2021, J. B. and M. R. contacted potential interviewees by email and/or phone, according to the individual's preference. For groups that remained underrepresented (e.g., by profession or geographic location), we snowball sampled from fellow members of the Canadian Critical Care Trials Group. Recruitment concluded once a diverse sample, based on maximum variation, had been achieved.

### Data collection

We conducted one-time, 30–60-min, open-ended interviews over videoconferencing software or phone, depending on participant preference. The interview guide was designed to follow the flow of conversation and explore the aspects of RFP most meaningful to the interviewee. The initial guide was based on themes from earlier phases of the authors' research program.<sup>33</sup> This guide was reviewed every two to five interviews to explore emerging themes and to allow for member-checking (ESM eAppendix 2). Interviews were conducted at a prearranged time convenient for the participant. All interviews were audio-recorded and transcribed with participant consent. Participants received a copy of their transcript to review for accuracy once available. J. B. conducted interviews 1-5, with Dr. Marghalara Rashid's supervision for interviews 1-2; M. R. conducted interviews 6-16. The team provided regular feedback to interviewers. The interviewers completed fieldnotes following each interview as part of an ongoing reflexive practice and to ensure that relevant nonverbal aspects were recorded. The fieldnotes were reviewed for context during the coding process but were not formally coded themselves.

## Data analysis

We performed an interpretive, inductive thematic analysis following the steps outlined by Braun and Clark.<sup>39</sup> All transcripts were first read for a sense of the whole and then independently, inductively coded using NVivo 12 qualitative analysis software (Lumivero, Denver, CO, USA). Coding was guided by the question: "What was meaningful about RFP for PICU clinicians?" To develop an initial codebook, the first three transcripts were



independently coded line-by-line by M. R., S. D., L. L., J. F., and J. B. The remaining transcripts were coded by two primary coders (M. R., S. D.) who met regularly to ensure consistency, refine definitions, and define new codes. Coding occurred while data collection was ongoing to allow for member-checking in subsequent interviews and further interview guide refinement. Every five interviews, the analysis team (M. R., S. D., L. L., J. F.) met to discuss emerging themes and to adjust the interview guide as needed. Once all transcripts were coded and the team reached consensus on the final codebook (ESM eAppendix 3), the team independently identified themes through inductive thematic analysis.<sup>39</sup> The team met to refine these themes and reach consensus. To see if this interpretive analysis resonated with interviewees, we sent the proposed themes with example quotes to interviewees in May 2022; 11/16 responded. We integrated this feedback into the final themes presented below.

## Results

Sixteen PICU clinicians participated in an interview. Interviewees included registered nurses (n = 8), one of

Table 1 Participant demographics

Variable	N = 16
Profession, n/total N (%)	
Registered nurse	8/16 (50%)
Physician	2/16 (8%)
Respiratory therapist	2/16 (8%)
Child life specialist	2/16 (8%)
Social worker	2/16 (8%)
Region of practice, $n/\text{total } N$ (%)	
Prairies	6/16 (38%)
Ontario	5/16 (31%)
Quebec	2/16 (13%)
Atlantic	2/16 (13%)
Pacific	1/16 (6%)
Years of practice, median (range)	
Years in profession	12 (2–34)
Years in PICU	4 (0.5–30)
Self-identification as Black, Indigenous and/or a person of colour, $n$ /total $N$ (%)	
Yes	2/16 (8%)
No	14/16 (92%)
Gender, $n/\text{total } N$ (%)	
Woman	15/16 (94%)
Man	1/16 (6%)

PICU = pediatric intensive care unit



whom had a management role; social workers (n = 2); child life specialists (n = 2); physicians (n = 2); and respiratory therapists (n = 2) (see Table 1 for demographic details). We identified four themes that illustrated clinicians' experiences with RFP policies; exemplary quotes ("Q#") are listed in Table 2.

Theme 1. "[Everybody] understood why it had to happen, but felt really sad for the patient": Balancing infection control and family presence

For study participants, RFP policies put infection control and family presence in opposition to one another, introducing a tension to balance these competing priorities. Early pandemic rules were understood and largely appreciated by clinicians, who expressed that decision-makers were doing the best they could to keep everyone safe given what was known at the time (Q1, Q2). Although interviewees encountered family member suffering (Q1), the rules seemed necessary and in balance given limited available knowledge and infection control concerns (O2). These early restrictions also helped put later restrictions into perspective; for example, a social worker expressed how much easier living with a two-caregiver rule was compared with the trauma felt when having to limit family presence to one caregiver (Q3). As the pandemic evolved, several clinicians did not feel that the rules evolved appropriately to maintain balance. Participants wanted restrictions to be responsive to the pandemic context and proportional to risks, and expressed increased recognition of the mental health risks posed by RFP (Q4, Q5). When an imbalance developed between infection control priorities and family presence, such as when bars could be open but two primary caregivers could not be in the unit with their critically ill child, participants experienced distress, sometimes described as moral distress, and feelings of injustice (Q4, Q5).

Theme 2. "Speaking into the wind": Feeling disempowered by hospital and policy-making hierarchies

Clinicians described top-down, "one-size-fits-all" policies that were made without bedside clinician input (Q6–Q8). The policies and their implementation removed autonomy from bedside clinicians, making it difficult to act in the perceived best interests of families (Q9). Further, frontline clinicians with little institutional power compared with policy-makers had the most responsibility for implementing and enforcing policies day to day. This power dynamic showed a lack of recognition for interviewees' FCC expertise when developing and implementing RFP policy (Q9, Q10). Bedside clinicians

#### Table 2 Exemplary quotes by theme

### Quote ID Exemplary quote

## Theme 1: Balancing infection control and family presence

- Q1 "I think everybody ... understood why it had to happen, but felt really sad for the patient, obviously, and also the family members who have to go through this alone or with very little support, right. At best, you had one more person to support you when your child is very ill, critically ill. But I think everyone understood why it had to happen. I just think it was difficult to see that."

  HCP008, Respiratory therapist (RT)
- Q2 "I think it was a necessary precaution that had to take place to protect children and families in our community from COVID-19." HCP007, Registered nurse (RN)
- Q3 "Having lived through the 'only one person' bedside, I can do this standing on my head because that was so traumatic for me personally. Denying a parent access to their critically ill child, that was brutal. So I can do two parents at the bedside easily." HCP006, Social worker (SW)
- Q4 "[The restrictions] just don't feel fair or right for the families. Especially when it came into 'open for summer' and people can go drink in bars and have gatherings outside, yet a grandparent can't come see their critically dying grandchild. It put a lot of moral distress on a lot of our nurses." HCP011, RN
- Q5 "I think an inordinate amount of importance was placed on the infectious disease science part of things. And I think that unfortunately we ignored the science around mental health and the profound effects that this had on people at the time and will have that they will carry forward." HCP009, Physician (MD)

#### Theme 2: Feeling disempowered by hospital and policy-making hierarchies

- Q6 "I feel like we voiced a lot of our concern because we were the ones that would go in the room every hour. But I don't think it made a really big impact. Because again, we're a big hospital, and the people that make the rules are higher up and not necessarily going into the room to make their check every hour. So they're not taking that into consideration what we have to say." HCP001, RT
- Q7 "Interviewer: Did you guys feel like you had a voice in [policy] decisions? Participant: I don't know. I mean yes, we did [have a voice] because our division had and our unit manager, our patient care manager were advocating for us. But I think ... But no [we didn't actually have a voice] ... Like no amount of advocating was going to change the inevitable. So we were speaking into the wind." HCP002, MD
- Q8 "There was a lot of conversations that happened about caregiver and family presence, probably with some of the right people. But I don't think that nursing perspective heavily weighed in, at least from [the] frontline. But I think if you would ask those questions and involve the right people to begin with, we probably could have addressed [issues] sooner." HCP007, RN
- Q9 "It put health care providers working very closely at the bedside with families in a bit of a precarious position because we didn't really have any control, we didn't really have any autonomy, and the decision-making power was not within us to use our critical thinking or our clinical judgement. It was very micromanaged by people at the top, higher." HCP006, SW
- Q10 "I think giving your staff a little bit of credit. Because things are not always black and white, especially in an area like [the] PICU. But just knowing that sometimes there are going to be exceptions to the rule, and we can use our critical thinking and our clinical judgement. Because we do it with everything else that we do each and every day." HCP007, RN
- Q11 "We just ... we stopped asking, maybe. Do you know what I mean? Like if you ask enough and you get no as an answer, you're not going to keep banging your head on the door, right" HCP002, MD
- Q12 "Interviewer: And was there a process for you if you formally disagreed with a decision that was made around the restricted family presence? Participant: Absolutely not. I know emails were sent, emails were brought forward to leadership, and there was never any follow through. There was a, "Thanks for letting us know," and that was it." HCP007, RN
- Q13 "I think our nursing colleagues would be at the forefront, to be honest, because they incredibly would identify these families that would fall through the cracks. And so I think it's really important to them to be part of the decision-making." HCP002, MD
- Q14 "There were some like emails sent around to staff with COVID updates daily. But honestly, they got so many. At one point, you would get like seven update emails a day. So hearing it right from the staff that you're working with, leadership that you're working with, just to reiterate the policy was really helpful. Because nobody has time to read seven long emails every 12-hour shift." HCP014. RN
- Q15 "Parents being told mixed messaging, and then us having to go in and be the bad guy, to say, no, you actually aren't allowed to leave or you aren't allowed to have your spouse come in." HCP010, RN
- Q16 "I think just knowing that you have your leadership behind you to come in to support your decision. Like our manager has been very clear. Even as recently as a staff meeting this week, to come in and say, "If you're having pushback and I'm in the building, call me and I'll come down and just reiterate the policy to them from a leadership standpoint," so that it doesn't actually all fall on the RNs because so much has over the last year and a half." HCP010, RN
- Q17 "For the vast majority of families, they understood what was happening. They got it. They understood that it was out of our control.

  And we made that very clear." HCP002, MD



#### Table 2 continued

### Quote ID Exemplary quote

#### Theme 3: Empathizing with family trauma

- Q18 "So I was just exhausted with like feeling for them because they were like suffering so much." HCP003, RN
- Q19 "I've seen some horrible stuff. But in the last year and a half, having to deal with that one parent at the bedside, that was the hardest thing I've ever done. Denying people access to their critically ill and injured children was brutal." HCP007, RN
- Q20 "I think, too, also just like feeling that huge like empathy for them, right. Like this is the hardest thing that they have ever done. And it was heartbreaking. Like it really was heartbreaking that other people couldn't be here. And that, you know, when kids were dying, it was just like it was awful." HCP016, Child Life Specialist (CL)
- Q21 "We have kids that have been here since pre-COVID with no passes who have changed so much developmentally that when the siblings see them, there's no recognition ... so that memory of their relationship is no longer existent. So it's been very difficult as a staff to watch that, to bear witness to that." HCP004, CL
- Weefore COVID, kids might come in and they might get overwhelmed and leave the unit. But I was able to follow them to a safe spot, right. Whereas if they're on the phone and they decide to hang up, they might not answer my call again. But at least when they were physically here and became upset or couldn't cope anymore, the child was in front of me and I could follow them and take them somewhere safe and sit with them, you know. And so we just didn't have that opportunity." HCP016, CL
- Q23 "It's been hard morally to watch parents go through death and dying situations of their children, and not be able to have the support of their family beside them." HCP011, RN
- Q24 "It was very tiring. And we certainly did not do an adequate job providing social supports because we would never in that situation. We would do our best to support the family. But we don't replace family. We don't replace friends, right. We don't replace colleagues. Like it's just not the same." HCP002, MD
- Q25 "We were all quite accommodating I found as far as providing Facetime updates and writing things down for the support person who was there so they were able to update the rest of the loved ones." HCP010, RN
- Q26 "When I first posed [the idea], the unit thought I was crazy. But it's now a standard practice that grandparents and siblings will come to the outdoor windows so they at least can look upon their loved one here in the ICU." HCP006, SW
- Q27 "We would take photos and send those home as part of the communication book [between siblings and patients], too. So we tried to get a bit creative ... When parents brought it back home, they would review it with the sibling. The sibling could write a message back. Sometimes they would write a message to the nurse to ask the nurse certain questions ... We would try to change it every day. And also talk about how there's like a social worker who meets with the family. And there's a really special doctor that just works on the lungs. And that's a respirologist. And kind of explain what that means. So we really wanted siblings to feel a part of the journey even though they weren't here." HCP015, SW
- Q28 "Every exception needed to be advocated for. And so we have advocated for, [for example,] we have a very young family who's daughter has serious heart disease ... and was very, very critically ill ... she spent weeks in hospital. And so her parents are young, and need support from the grandparents. And so we have advocated to allow the grandparents in partly for respite but also so that they can see what's going on and better support the parents." HCP009, MD

## Theme 4: Navigating threats to the therapeutic relationship

- Q29 "When you're looking at the patient in terms of like the community and the social environment that they're in, yes, that was impacted. Caring for the whole patient was impacted. But caring for the medical disease in front of me was not affected." HCP002, MD
- Q30 "I guess for me what I struggle with is that ... I know that there's no going back. And we will [miss opportunities] and we have missed opportunities. And it's timely. And so for me, there's regret. Like there is that regret at times when no matter what the change or what this family needs, we can't accommodate it." HCP004, CL
- Q31 "I would say that there was kind of an increase in frustration or anger expressed towards staff, and not the right people, right. So again, not the people at the end of the day that can really be part of making that change. I think it was directed to the people who were doing their best, and don't have a lot of autonomy." HCP006, SW
- Q32 "I would have really good relationships with family members in the past. But then to have that relationship, and then be like, "By the way, you need to leave now," was like really hard. So you kind of like were a little bit farther away. And that way it wasn't so challenging to have those conversations. Which isn't great for relationships in this role in this field." HCP003, RN
- Q33 "The ones who were constantly asking for exception, they were constantly being denied, then we just kind of became the bad guy.

  And that strained the relationship." HCP010, RN
- Q34 "I was lucky, in general as a respiratory therapist, I don't really have to enforce that rule. So I don't have to directly deal with the families that are upset when you can only have one family member or two family members. So for me, I didn't directly have to implement it. So I guess I don't have a ton of emotional experience with that part." HCP008, RT



#### Table 2 continued

Quote ID Exemplary quote

Q35 "[If a parent] was absolutely livid, I would call upon [management] to come talk to the parents to kind of remove me from that decision-making process. [...] it kind of protected my role as a support person, right. Because that's a hard position to be in. My job is parent and family support. And if I'm seen as the person that's denying them something or taking away something, it makes it that much harder. So I'm pretty good at gauging when that line has been crossed, when [it's] interfering with how I can perform my duties. That's when I would call in the unit manager to say, "You need to come in and be, you know, the hard ass person that's laying down the law." And they're very supportive that way." HCP006, SW

CL = child life specialist; MD = physician; RN = registered nurse; RT = respiratory therapist; SW = social worker

also felt unheard when they advocated for their patients and voiced concerns about RFP policies (Q7, Q11, Q12). As the professionals who had to manage the policy consequences daily (Q9), interviewees emphasized the need for frontline voices in policy design (Q10, Q13).

Interviewees also found that policy communication to frontline clinicians was top-down and overwhelming (Q14). This led to inconsistent policy application, frustrating both clinicians and the families with whom they worked (Q15). Hearing information directly from trusted managers and supervisors helped, and several clinicians described support as good communication via clear policies, clear rationale, and leadership presence in unit to help communicate rules (Q14, Q16). This hierarchy and its related power dynamics also had some benefits. For example, clinicians responsible for enforcing the rules appreciated being able to defer blame to leadership and would make this lack of control clear to families; this helped preserve clinicians' therapeutic relationship with families (Q16, Q17).

Theme 3. "Exhausted with feeling for them": Empathizing with family trauma

Throughout the interviews, clinicians shared their perceptions of how RFP policies and practices impacted PICU families, including many stories of bearing witness to situations in which they perceived that family members experienced trauma (Q18-Q21). Being present for these experiences impacted clinicians themselves; interviewees described being present for these moments as "heartbreaking" (Q20). The act of having to deny family members' access to a critically ill child weighed on clinicians (Q19). Child life specialists felt particularly distressed by separating siblings, both for the time lost in these important developmental relationships and for the potential harm to the patients' sibling(s) (Q21, Q22). When discussing these situations and their emotional reactions, clinicians felt moral distress since they were unable to do for the patients and families what they felt was in their best interest (Q23). One clinician summed up the sentiment of many by saying: "I was just exhausted with feeling for them because they were suffering so much" (Q18).

The empathy for what families were experiencing helped clinicians identify fault lines in the policies, such as limiting available supports for families (Q23, Q24), and invited critical consideration as the pandemic evolved as to whether the infection control benefits still outweighed the costs to families (Q4, Q5). Although clinicians tried to provide support as best they could, they indicated that this could only go so far: "We don't replace family [...] it's just not the same" (Q24). Driven by their empathy and commitment to FCC, study participants nonetheless found creative ways to keep families connected, provided additional support, and advocated for change (Q25-Q28). Given these insights, RFP may put clinicians at increased risk of compassion fatigue and moral distress; a risk that may be compounded by perceived threats to FCC and the therapeutic relationship.

Theme 4. "We became the bad guy": Navigating threats to the therapeutic relationship

Although "caring for the medical disease" stayed the same, as expressed by a physician, "caring for the whole patient" was negatively impacted by RFP policies and practices (Q29). This limited clinicians' ability to deliver FCC (Q30). Having to enforce policies or deliver bad news related to family presence limitations with insufficient support to do so was detrimental to the therapeutic relationship (Q31–Q33). For example, a nurse shared that she began to distance herself from families to make those enforcement conversations easier "which isn't great for relationships in this role"; this contrasted with her pre-pandemic experience of having "really good relationships" with families (Q32). Clinicians shared several factors that helped protect the therapeutic relationship in face of threats. Respiratory therapists described being removed from policy enforcement and able to leave the bedside, which protected their own therapeutic relationship and minimized the perceived impact of the policies on themselves compared with other interviewees (Q34). Other protective factors included receiving support from leadership (Q16, Q35), providing



families with social and physical support (e.g., facilitating innovative ways to keep families in touch with those who could not be physically present) (Q25–Q27), and providing and advocating for exceptions (Q28).

### Discussion

Understanding clinician experiences and impacts from policies enacted during unprecedented contexts can inform both emergency-preparedness planning and everyday policies. In this study, we identified four themes reflecting PICU clinicians' lived experiences with RFP policies during the COVID-19 pandemic: 1) balancing infection control and family presence; 2) feeling disempowered by hospital and policy-making hierarchies; 3) empathizing with family trauma; and 4) navigating threats to the therapeutic relationship. These findings largely align with the emerging literature in pediatrics and critical care more broadly, while providing important nuances specific to the PICU context.

Our findings differ from studies with adult ICU clinicians in that feelings toward the policies among participants in our study were more mixed,<sup>30</sup> and our study did not highlight increased communication difficulties.<sup>40–43</sup> This is likely related to the allowance of at least one family member, which seemed to mitigate some of the negative impacts experienced in adult ICUs, such as witnessing patients dying alone.<sup>16</sup>

Pediatric ICU clinicians play an integral role in maintaining FCC, especially during times of crisis. 31,44 Being responsible for implementing policies that conflicted with such a foundational principle as FCC was difficult for clinicians in our study, especially since their presence at the bedside necessitated bearing witness to the impacts of restrictions on patients and family members. Conflict with PICU values, such as FCC, can be minimized through reframing family presence policies to focus on "how" to enable and optimize family presence rather than "if" or "when" parents can visit. Taking action to minimize value conflicts could protect against moral distress. 5,6

The empathy interviewees experienced for patients and families deeply weighed on them, putting them at risk for compassion fatigue.<sup>7,9</sup> Empathy is a cornerstone of strong therapeutic relationships between patients, families, and clinicians.<sup>46,47</sup> A correlational study found that the more empathy critical care nurses displayed, the more accurately they assessed family needs.<sup>47</sup> Similarly, our findings showed that empathy helped maintain the therapeutic relationship in the face of challenges by identifying and addressing family needs. It is worth recognizing these efforts, while also appreciating the burden they place on clinicians. It is also important to create proactive,

sustainable systems that support delivery of high-quality FCC and that do not rely on reactive, individual-level actions alone.

When institutional policies pose potential risks for clinicians, the stakeholder perspective must be sought to understand impacts and improve assessment of policy proportionality. Based on our findings, frontline clinicians wanted meaningful opportunities to provide their input and expertise with initial and ongoing development of RFP policies. Further, pediatric frontline clinicians often face moral distress when they are "tasked with implementing policies that they did not develop,"45 characterizing a morally hazardous environment.<sup>48</sup> This environment was exacerbated by the power dynamics illustrated above, whereby 1) those implementing restrictions were removed from decision-making and 2) those with the least institutional power bore the weight of unintended consequences resulting from RFP policy implementation. Similar tensions were described by Wall et al. in their study of organizational influences on moral distress for PICU clinicians: "[participants observed that] managers tend to 'address the power angle' by reminding nurses that the decision-making power belongs to management. As another nurse pointed out, 'After a while, you realize that your voice is not wanted.",49 Involving frontline clinician perspectives in RFP policy development may help mitigate this capacity for moral hazard and is supported by emerging recommendations from acute care,<sup>20</sup> critical care, <sup>26,50,51</sup> and pediatric palliative care. <sup>45</sup>

# Strengths and limitations

This study has several strengths. The multidisciplinary study team, including PICU family partners (C. S., M. W.), supported a holistic presentation of findings, ensured different perspectives were considered, and minimized bias. Purposive maximum variation sampling ensured experiences of multiple professions were heard, reflecting the PICU's interprofessional work environment. This study also employed several techniques to ensure validity, such as maintaining a detailed record of data collection activities, member-checking through an iterative interview guide design, interviewee verification of own transcripts, and interviewee feedback on preliminary themes.

Study limitations include the decision to recruit clinicians who completed a survey in an earlier phase of the same research program. There may be a selection bias as it is possible that people who complete a survey and volunteer for an additional interview have particularly strong feelings on a topic and their views may have differed from those of other respondents. There may also be recall bias as most PICUs had moved away from the



strictest policies (e.g., one caregiver only) by the time of interview. Since the study design prioritized what was most meaningful to interviewees, it is likely that the most impactful and meaningful experiences were still easily accessible. Finally, this study only included clinicians who were comfortable being interviewed in English, consequently limiting input from non-English-speaking clinicians.

#### Conclusion

Canadian PICU clinicians were impacted by RFP policies during the COVID-19 pandemic. Although interviewees felt that these policies were necessary during early pandemic stages, many felt the policies did not evolve proportionally to infection risk and placed undue stress on families and their critically ill children. The impacts on families were hard to witness and weighed heavily on interviewees. RFP policies contributed to feelings of disempowerment and challenged clinicians' perceived ability to provide the best FCC possible. Looking forward, frontline expertise should be reflected in future policy design and implementation to best support FCC in any context and minimize risks of moral distress. Policymakers can better empower PICU clinicians and honour their expertise by directly involving them in policy development and by acting upon frontline feedback as the circumstances evolve.

Author contributions Molly J. Ryan contributed to data collection, analysis, interpretation of data, and drafting and revising the article including the first draft. Laurie Lee and Jennifer R. Foster contributed to study conception and design, data analysis, interpretation of data and drafting and revising the manuscript. Sara Drisdelle contributed to data analysis, interpretation of data, and revising the manuscript. Daniel Garros, Corey Slumkoski, and Martha Walls contributed to study conception and design, interpretation of data and revising the manuscript. Jamie A. Seabrook and Janet Curran contributed to study conception and design and revising the manuscript. Jacqueline Bretzler contributed to data collection, analysis, and revising the manuscript. Laura Betts and Stacy Burgess contributed to study conception and revising the manuscript.

**Acknowledgements** The authors would like to thank the pediatric intensive care unit clinicians who generously shared their experiences and time with the research team. We would also like to acknowledge Dr. Marghalara Rashid for her support in supervising early interviews for this study.

**Disclosures** The authors have no competing interests to declare.

**Funding statement** This study was supported by a grant from IWK Health (#1025925) and from the Canadian Institutes of Health Research (Funding reference number 174916).

**Editorial responsibility** This submission was handled by Dr. Patricia S. Fontela, Associate Editor, *Canadian Journal of Anesthesia/Journal canadien d'anesthésie.* 

**Open Access** This article is licensed under a Creative Commons Attribution-NonCommercial 4.0 International License, which permits any non-commercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit http://creativecommons.org/licenses/by-nc/4.0/.

## References

- Ramnarayan P, Craig F, Petros A, Pierce C. Characteristics of deaths occurring in hospitalised children: changing trends. J Med Ethics 2007; 33: 255–60. https://doi.org/10.1136/jme.2005. 015768
- Chuang CH, Tseng PC, Lin CY, Lin KH, Chen YY. Burnout in the intensive care unit professionals: a systematic review. Medicine (Baltimore) 2016; 95: e5629. https://doi.org/10.1097/md. 00000000000005629
- 3. Colville GA, Smith JG, Brierley J, et al. Coping with staff burnout and work-related posttraumatic stress in intensive care. Pediatr Crit Care Med 2017; 18: e267–73. https://doi.org/10.1097/pcc.0000000000001179
- Garcia TT, Ramos Garcia PC, Molon ME, et al. Prevalence of burnout in pediatric intensivists: an observational comparison with general pediatricians. Pediatr Crit Care Med 2014; 15: e347–53. https://doi.org/10.1097/pcc.0000000000000218
- Dryden-Palmer K, Moore G, McNeil C, et al. Moral distress of clinicians in Canadian pediatric and neonatal ICUs. Pediatr Crit Care Med 2020; 21: 314–23. https://doi.org/10.1097/pcc. 00000000000002189
- Garros D, Austin W, Carnevale FA. Moral distress in pediatric intensive care. JAMA Pediatr 2015; 169: 885–6. https://doi.org/10.1001/jamapediatrics.2015.1663
- Alharbi J, Jackson D, Usher K. Compassion fatigue in critical care nurses. An integrative review of the literature. Saudi Med J 2019; 40: 1087–97. https://doi.org/10.15537/smj.2019.11.24569
- 8. Xie W, Chen L, Feng F, et al. The prevalence of compassion satisfaction and compassion fatigue among nurses: a systematic review and meta-analysis. Int J Nurs Stud 2021; 120: 103973. https://doi.org/10.1016/j.ijnurstu.2021.103973
- Alharbi J, Jackson D, Usher K. The potential for COVID-19 to contribute to compassion fatigue in critical care nurses. J Clin Nurs 2020; 29: 2762–4. https://doi.org/10.1111/jocn.15314
- Bruyneel A, Bouckaert N, de Noordhout CM, et al. Association of burnout and intention-to-leave the profession with work environment: a nationwide cross-sectional study among Belgian intensive care nurses after two years of pandemic. Int J Nurs Stud 2023; 137: 104385. https://doi.org/10.1016/j.ijnurstu.2022. 104385



- Toscano F, Tommasi F, Giusino D. Burnout in intensive care nurses during the COVID-19 pandemic: a scoping review on its prevalence and risk and protective factors. Int J Environ Res Public Health 2022; 19: 12914. https://doi.org/10.3390/ ijerph191912914
- Crowe L, Young J, Turner MJ. What is the prevalence and risk factors of burnout among pediatric intensive care staff (PICU)? A review. Transl Pediatr 2021; 10: 2825–35. https://doi.org/10.21037/tp-20-400
- Gualano MR, Sinigaglia T, Lo Moro G, et al. The burden of burnout among healthcare professionals of intensive care units and emergency departments during the COVID-19 pandemic: a systematic review. Intl J Environ Res Public Health 2021; 18: 8172. https://doi.org/10.3390/ijerph18158172
- Lima A, Moreira MT, Fernandes C, et al. The burnout of nurses in intensive care units and the impact of the SARS-CoV-2 pandemic: a scoping review. Nurs Rep 2023; 13: 230–42. https://doi.org/10.3390/nursrep13010022
- Vincent JL, Boulanger C, van Mol MM, Hawryluck L, Azoulay E. Ten areas for ICU clinicians to be aware of to help retain nurses in the ICU. Crit Care 2022; 26: 310. https://doi.org/10.1186/ s13054-022-04182-y
- Foster JR, Lee LA, Seabrook JA, et al. Family presence in Canadian PICUs during the COVID-19 pandemic: a mixedmethods environmental scan of policy and practice. CMAJ Open 2022; 10: E622–32. https://doi.org/10.9778/cmajo.20210202
- Johnson BH, Seale Jeppson E, Redburn L. Caring for Children and Families: Guidelines for Hospitals, 1st ed. Bethesda: Association for the Care of Children's Health; 1992.
- Kuzin JK, Yborra JG, Taylor MD, et al. Family-member presence during interventions in the intensive care unit: perceptions of pediatric cardiac intensive care providers. Pediatrics 2007; 120: e895–901. https://doi.org/10.1542/peds.2006-2943
- Camporesi A, Zanin A, Kanaris C, Gemma M, Lanziotti VS. Impact of COVID-19 pandemic on pediatric intensive care unit (PICU) visiting policies: a worldwide survey. J Pediatr Intensive Care 2021; 9: 764583. https://doi.org/10.1055/s-0041-1739263
- Moss SJ, Krewulak KD, Stelfox HT, et al. Restricted visitation policies in acute care settings during the COVID-19 pandemic: a scoping review. Crit Care 2021; 25: 347. https://doi.org/10.1186/ s13054-021-03763-7
- Fiest KM, Krewulak KD, Hiploylee C, et al. An environmental scan of visitation policies in Canadian intensive care units during the first wave of the COVID-19 pandemic. Can J Anesth 2021; 68: 1474–84. https://doi.org/10.1007/s12630-021-02049-4
- 22. Andrist E, Clarke RG, Harding M. Paved with good intentions: hospital visitation restrictions in the age of coronavirus disease 2019. Pediatr Crit Care Med 2020; 21: e924–6. https://doi.org/10.1097/pcc.0000000000002506
- Balistreri KA, Lim PS, Tager JB, et al. "It has added another layer of stress": COVID-19's impact in the PICU. Hosp Pediatr 2021; 11: e226–34.
- 24. Jensen HI, Åkerman E, Lind R, et al. Conditions and strategies to meet the challenges imposed by the COVID-19-related visiting restrictions in the intensive care unit: a Scandinavian crosssectional study. Intensive Crit Care Nurs 2022; 68: 103116. https://doi.org/10.1016/j.iccn.2021.103116
- Stenman L, Högberg L, Engström A. Critical care nurses' experiences caring for patients when relatives were not allowed in the ICUs due to COVID-19 pandemic. SAGE Open Nurs 2022;
   23779608221103627. https://doi.org/10.1177/23779608221103627

- Fiest KM, Krewulak KD, Hernández LC, et al. Evidenceinformed consensus statements to guide COVID-19 patient visitation policies: results from a national stakeholder meeting. Can J Anesth 2022; 69: 868–79. https://doi.org/10.1007/s12630-022-02235-y
- O'Brien JM, Bae FA, Kawchuk J, et al. Impact of COVID-19 visitor restrictions on healthcare providers in Canadian intensive care units: a national cross-sectional survey. Can J Anesth 2022; 69: 278–80. https://doi.org/10.1007/s12630-021-02139-3
- 28. Wendlandt B, Kime M, Carson S. The impact of family visitor restrictions on healthcare workers in the ICU during the COVID-19 pandemic. Intensive Crit Care Nurs 2022; 68: 103123. https://doi.org/10.1016/j.iccn.2021.103123
- Hugelius K, Harada N, Marutani M. Consequences of visiting restrictions during the COVID-19 pandemic: an integrative review. Int J Nurs Stud 2021; 121: 104000. https://doi.org/10.1016/j.ijnurstu.2021.104000
- Bardon E. An ethical approach to considering family presence during COVID-19. Healthc Manage Forum 2021; 34: 193–5). https://doi.org/10.1177/0840470420980655
- 31. Tedesco B, Borgese G, Cracco U, Casarotto P, Zanin A. Challenges to delivering family-centred care during the coronavirus pandemic: voices of Italian paediatric intensive care unit nurses. Nurs Crit Care 2021; 26: 10–2. https://doi.org/10.1111/nicc.12578
- Bannerman K, Aitken L, Donnelly P, Kidson C. Parental perceptions of the impact of COVID-19 restrictions on familycentred care at a paediatric intensive care unit. Br J Child Health 2021; 2: 195–200. https://doi.org/10.12968/chhe.2021.2.4.195
- Foster JR, Lee LA, Seabrook JA, et al. A survey of PICU clinician impact and experience with restricted family presence during COVID-19. Can J Anesth 2023; 70: 1669–81. https://doi.org/10.1007/s12630-023-02547-7
- 34. Moynihan KM, Bailey V, Beke DM, Alizadeh F, Gauvreau K, Snaman JM. Staff perceptions of dying and death in a pediatric cardiac intensive care unit during COVID-19. Am J Crit Care 2023; 32: 221–5. https://doi.org/10.4037/ajcc2023424
- 35. Wray J, Pierce CM, Oldham G. The impact of restrictions to visiting in paediatric intensive care during the COVID-19 pandemic. Nurs Crit Care 2023; 28: 818–25. https://doi.org/10.1111/nicc.12873
- 36. Lopez KA, Willis DG. Descriptive versus interpretive phenomenology: their contributions to nursing knowledge. Qual Health Res 2004; 14: 726–35. https://doi.org/10.1177/1049732304263638
- Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. Int J Qual Health Care 2007; 19: 349–57. https://doi.org/10.1093/intqhc/mzm042
- 38. Gentles SJ, Jack SM, Nicholas DB, McKibbon K. A critical approach to reflexivity in grounded theory. Qual Rep 2014; 19: 1–14. https://doi.org/10.46743/2160-3715/2014.1109
- Braun V, Clarke V. Using thematic analysis in psychology. Qual Res Psychol 2006; 3: 77–101. https://doi.org/10.1191/ 1478088706qp063oa
- Chanchalani G, Arora N, Nasa P, et al. Visiting and communication policy in intensive care units during COVID-19 pandemic: a cross-sectional survey from South Asia and the Middle East. Indian J Crit Care Med 2022; 26: 268–75. https://doi.org/10.5005/jp-journals-10071-24091
- 41. Krewulak KD, Jaworska N, Spence KL, et al. Impact of restricted visitation policies during the first wave of the COVID-19 pandemic on communication between critically ill patients, families, and clinicians: a qualitative interview study. Ann Am Thorac Soc 2022; 19: 1169–76. https://doi.org/10.1513/annalsats. 202107-877oc



- 42. Parsons Leigh J, Mizen SJ, Moss SJ, et al. A qualitative descriptive study of the impact of the COVID-19 pandemic on staff in a Canadian intensive care unit. Can J Anesth 2023; 70: 384–94. https://doi.org/10.1007/s12630-022-02377-z
- 43. *Tabah A, Elhadi M, Ballard E, et al.* Variation in communication and family visiting policies in intensive care within and between countries during the Covid-19 pandemic: the COVISIT international survey. J Crit Care 2022; 71: 154050. https://doi.org/10.1016/j.jcrc.2022.154050
- 44. Carnevale F, Baptiste K, Di Furia, et al. Pediatric Intensive Care Nursing—issue December 2020. Available from URL: https://www.mcgill.ca/picn/files/picn/2020.picn\_.v1-2\_1.pdf (accessed January 2024).
- Kaye EC. COVID-19 caregiver restrictions in pediatrics. Hosp Pediatr 2021; 11: e12–4. https://doi.org/10.1542/hpeds.2020-004291
- Moreno-Poyato AR, Rodríguez-Nogueira Ó, MiRTCIME.CAT Working Group. The association between empathy and the nurse– patient therapeutic relationship in mental health units: a crosssectional study. J Psychiatr Ment Health Nurs 2021; 28: 335–43. https://doi.org/10.1111/jpm.12675
- 47. Murphy PA, Forrester DA, Price DM, Monaghan JF. Empathy of intensive care nurses and critical care family needs assessment. Heart Lung 1992; 21: 25–30.

- Brunnquell D, Michaelson CM. Moral hazard in pediatrics. Am J Bioeth 2016; 16: 29–38. https://doi.org/10.1080/15265161.2016. 1180441
- Wall S, Austin WJ, Garros D. Organizational influences on health professionals' experiences of moral distress in PICUs. HEC Forum 2016; 28: 53–67. https://doi.org/10.1007/s10730-015-9266-8
- 50. Fiest KM, Krewulak KD, Jaworska N, et al. Impact of restricted visitation policies during COVID-19 on critically ill adults, their families, critical care clinicians, and decision-makers: a qualitative interview study. Can J Anesth 2022; 69: 1248–59. https://doi.org/10.1007/s12630-022-02301-5
- 51. Fiest KM, Krewulak KD, Makuk K, et al. A modified Delphi process to prioritize experiences and guidance related to ICU restricted visitation policies during the coronavirus disease 2019 pandemic. Crit Care Explor 2021; 3: e0562. https://doi.org/10.1097/cce.0000000000000562

**Publisher's Note** Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

