An Institutional Model for Health Care Workers' Mental Health During Covid-19

Gilla K. Shapiro, MA(Cantab), MPP/MPA, PhD, C. Psych, Christian Schulz-Quach, MSc, MA, MD, Andrew Matthew, PhD, C. Psych, Pamela Mosher, MD, MDiv, Gary Rodin, MD, Froukje de Vries, MD, PhD, Sarah Hales, MD, PhD, Chana Korenblum, MD, SarahRose Black, RP, MTA, PhD, Lydia Beck, MScOT, Kim Miller, MD, Jody Morita, MD, Madeline Li, MD, PhD, Mary Elliott, MD

There is an urgent need for institutionally integrated approaches to prevent burnout and support the mental health of health care workers (HCWs) during the Covid-19 pandemic and on an ongoing basis. The Princess Margaret Cancer Centre, a tertiary teaching hospital, developed and implemented CREATE—Compassion, REsilience And TEam-building. CREATE is a proactive team-based support intervention delivered at the point of care by psychosocial coaches (PSCs) to multidisciplinary frontline and oncology teams. Quantitative administrative data and qualitative process data were recorded by PSCs during the first pandemic wave from March 27 to June 19, 2020. Thirteen PSCs and clinical managers were paired to support 27 HCW teams. HCW team needs that were addressed by PSCs were categorized into four themes: (1) physical (14.5%), (2) social (28.4%), (3) psychological (46.2%), and (4) spiritual (10.9%). The emotional tone expressed within the teams became more positive over time, suggesting a reduction in team-level distress and an increase in team resilience. CREATE was perceived as valuable by PSCs, HCWs, and hospital leadership. This team-based approach can be rapidly adopted and delivered by other institutions during Covid-19 and applied to future pandemics.

The World Health Organization declared the Covid-19 pandemic on March 11, 2020. By January 16, 2021, Canada reported 702,183 Covid-19 cases, with Ontario as the province with the second largest number of cases (Figure 1).[1,2] The medical impact of the Covid-19 pandemic has been

globally devastating in terms of mortality, hospital admissions, poor quality of dying and death, and reduction of non-Covid-19–related health care.[3] These factors and their social and economic consequences contribute to the negative effects of large-scale disasters related to mental health, referred to as mass trauma,[4] and highlight the need for increased mental health preparedness and "ready to rollout" interventions.[5]

FIGURE 1

Time Series of Covid-19 Cases and Deaths in Ontario, Canada.
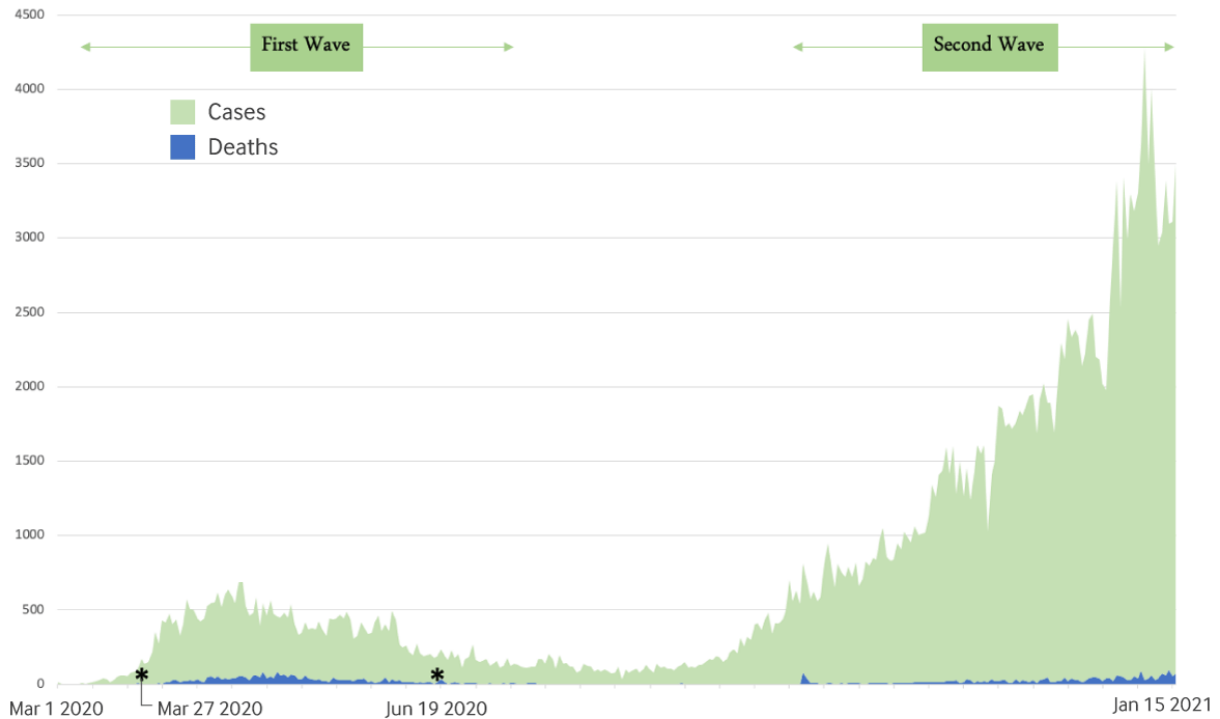
*Indicates start and end dates of the CREATE data-collection period (March 27, 2020 to June 19, 2020).
Data Source: Public Health Ontario. Ontario COVID-19 Data Tool. 2021. Accessed January 17, 2021.
https://www.publichealthontario.ca/en/data-and-analysis/infectious-disease/covid-19-data-surveillance/covid-19-data-tool?tab=summary
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While emergency preparedness plans are typically focused on the biological and economic aspects of pandemics, Covid-19 has engendered renewed calls for mental health interventions on individual, community, and organizational levels.[6-10] Successfully mitigating the negative public health consequences of the pandemic requires preventing the effects of mass trauma on our last line of defence: our health care workers (HCWs).[11,12]

HCWs face both vicarious and direct multifaceted psychological trauma, including moral distress after witnessing poor quality of death, concerns about personal protective equipment (PPE), and fears and guilt about transmitting Covid-19 to their families.[13] Two large cross-sectional surveys of HCWs from China (n = 1,257) and Italy (n = 1,379) during the Covid-19 pandemic demonstrated

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high levels of pandemic-related distress, symptoms of depression, anxiety, and insomnia, with greater symptoms among frontline HCWs than among non-frontline HCWs.[14,15] As demonstrated in previous epidemics, HCWs also experience distress that can persist for years beyond the acute crisis, including posttraumatic stress, burnout, and reduced productivity.[7,16-18]

Mass trauma intervention practices generally have adopted the approach of providing psychological first aid,[19,20] including promoting a sense of safety, restoring calm, enhancing self-efficacy and team efficacy, cultivating connection, and instilling hope.[5] Although different approaches to support HCWs during a pandemic have been explored, the optimal approach remains unclear.[21,22] Available interventions have included self-directed psychoeducational websites and flyers[23,24] and the provision of individual or group support.[25,26] Notably, among HCWs in Wuhan, China, only 36.3% accessed psychological materials and 17.5% participated in counseling, despite a high prevalence of moderate to severe depression.[27] Frontline HCWs may not have the time, energy, or motivation to access passively delivered support. In addition, individual mental health services are less likely to be accessed because of the stigma associated with such services and the lack of available resources; furthermore, HCWs are often reactive, seeking support only after the onset of high distress or burnout.

Distress among HCWs may be related not only to the burden of caring for patients with Covid-19 infections, but also to caring for medical patients without Covid-19, for example, in the oncology setting. The distress of oncology HCWs may additionally be heighted by knowledge of the estimated 20% increase in mortality risk for patients with cancer during Covid-19[28] due to their immunocompromised status, delays in receiving cancer care, or their avoidance of essential or urgent care due to concerns about infection risk or social isolation. Health care organizations must attend to the mental health needs of such HCWs. Important organizational practices include clear communication, reflective leadership, and allowance for staff respite.[8,29] Although such strategies have garnered acceptability, a structured and comprehensive team-based intervention allows for rapid and widespread adoption across the institution and maximizes the possiblity of uptake by HCWs under time pressures and stress.

To address these gaps, we developed CREATE (Compassion, REsilience And TEam-building), a proactive, prophylactic team-based support intervention that is delivered to multidisciplinary oncology health care teams that provide care to cancer patients with and without Covid-19. CREATE incorporates an evidence-based conceptual framework, established during the SARS epidemic,[30,31] whereby psychological first aid and adaptive coping interventions are collaboratively embedded into clinic workflows in order to (1) incorporate a peer support element that enhances team cohesion and social support[32]; (2) facilitate emotional validation, normalization of traumatic reactions, problem-solving, and mutual instruction on effective coping[5]; and (3) minimize additional time or initiation on the part of the HCWs. CREATE is a team-based intervention for HCWs in the context of an institutional framework that includes foundational safety measures and mental health supports for all staff. In the present article, we discuss the development and implementation of CREATE.

CREATE Development

Institutional Setting

CREATE was developed in March 2020 by members of the Psychosocial Oncology division of the Department of Supportive Care at Princess Margaret Cancer Centre (PM) in Toronto, Ontario. PM, the dedicated cancer hospital within the University Health Network (UHN), is one of the largest comprehensive cancer treatment facilities in the world, with >3,000 HCWs and >400,000 ambulatory patient visits annually.[33] Specialized psychosocial providers from interdisciplinary backgrounds including psychiatry, psychology, occupational therapy, music therapy, and spiritual care volunteered to become embedded psychosocial coaches (PSCs) to oncology teams at PM within CREATE.

CREATE Team Model

CREATE aims to promote team cohesion, reduce distress, prevent burnout, foster resiliency, and cultivate posttraumatic growth and efficacy (Figure 2). Its development was guided by a logic model that outlines the audience, activities, inputs, outputs, and intended short- and long-term outcomes to be evaluated in the future (Figure 3). CREATE pairs PSCs with clinical managers to enhance engagement within hospital teams and to support managers in addressing their teams' psycho-emotional concerns. The PSCs attend existing team meetings as well as drop-in visits to units in order to provide team support and are also available to respond to destabilizing or threatening situations that may arise. PSCs were trained in the care model through an initial 90-minute webinar, followed by weekly 1-hour virtual meetings to share, support, and identify gaps in the model. As psychosocial oncology care providers, the PSCs already had experience in trauma-informed and readily adaptable skill sets to mitigate pandemic-related distress. Support of teams will extend beyond the acute phases of the pandemic to address ongoing issues related to cumulative grief, moral distress, and vicarious trauma.
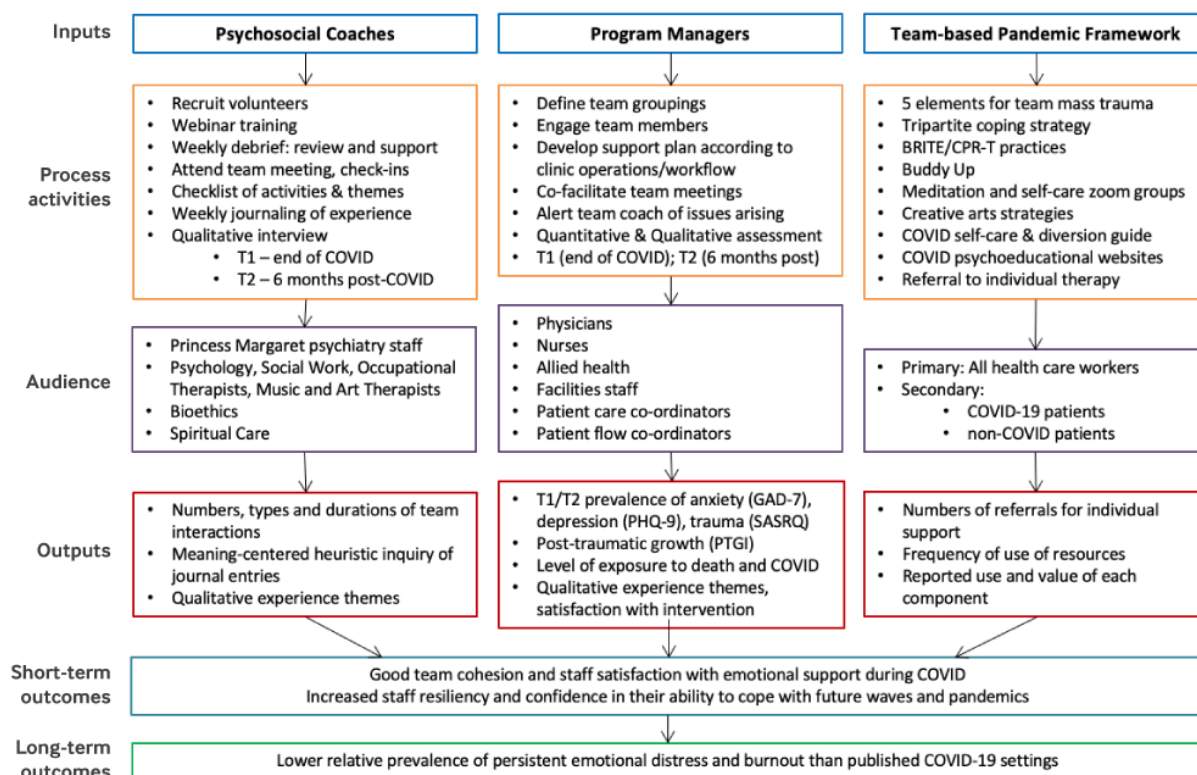
FIGURE 2

CREATE Team Model

Source: The authors

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FIGURE 3

CREATE logic model

Inputs	**Psychosocial Coaches**	**Program Managers**	**Team-based Pandemic Framework**

Process activities	• Recruit volunteers
	• Webinar training
	• Weekly debrief: review and support
	• Attend team meeting, check-ins
	• Checklist of activities & themes
	• Weekly journaling of experience
	• Qualitative interview
	   • T1 – end of COVID
	   • T2 – 6 months post-COVID
		• Define team groupings
		• Engage team members
		• Develop support plan according to clinic operations/workflow
		• Co-facilitate team meetings
		• Alert team coach of issues arising
		• Quantitative & Qualitative assessment
		• T1 (end of COVID); T2 (6 months post)
			• 5 elements for team mass trauma
			• Tripartite coping strategy
			• BRITE/CPR-T practices
			• Buddy Up
			• Meditation and self-care zoom groups
			• Creative arts strategies
			• COVID self-care & diversion guide
			• COVID psychoeducational websites
			• Referral to individual therapy

Audience	• Princess Margaret psychiatry staff
	• Psychology, Social Work, Occupational Therapists, Music and Art Therapists
	• Bioethics
	• Spiritual Care
		• Physicians
		• Nurses
		• Allied health
		• Facilities staff
		• Patient care co-ordinators
		• Patient flow co-ordinators
			• Primary: All health care workers
			• Secondary:
			   • COVID-19 patients
			   • non-COVID patients

Outputs	• Numbers, types and durations of team interactions • Meaning-centered heuristic inquiry of journal entries • Qualitative experience themes	• T1/T2 prevalence of anxiety (GAD-7), depression (PHQ-9), trauma (SASRQ) • Post-traumatic growth (PTGI) • Level of exposure to death and COVID • Qualitative experience themes, satisfaction with intervention	• Numbers of referrals for individual support • Frequency of use of resources • Reported use and value of each component
Short-term outcomes	Good team cohesion and staff satisfaction with emotional support during COVID Increased staff resiliency and confidence in their ability to cope with future waves and pandemics		
Long-term outcomes	Lower relative prevalence of persistent emotional distress and burnout than published COVID-19 settings		

Source: The authors

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The components of the CREATE program were integrated with other services offered UHN-wide, including at PM. Similar to other institutions,[29] UHN provides a safe work environment (Covid-19 symptom screening at entrances, reduction of patient and visitor volumes, sufficient PPE, Covid-19 staff testing), a place for staff to rest, access to food, quarantine and workplace accommodations, redeployment training and preparation, provision of childcare/family support, and frequent and transparent communication about institutional Covid-19 policies and status through hospital-wide emails and regular virtual open forums (Figure 2). CREATE PSCs also triaged HCWs who required further support to individual counselling services available within UHN or outside the organization.

Components of the CREATE Intervention

CREATE is designed so that coaches promote the essential elements of psychological first aid.[5] PSCs use six main components in a flexible manner, tailored to team needs (Figure 2).

1. **Address emotional needs:** Coaches used a variety of techniques to normalize, validate, and address challenging emotions such as anger, moral distress, frustration, disappointment,

grief, and fear of abandonment as well as fundamental needs (such as sleep and energy) that contribute to emotion. HCW are encouraged to adopt a Buddy-Up strategy,[34] organizing into pairs or small groups for daily check-ins of emotional support and connection.

2. **Calming strategies:** Coaches deliver evidence-based calming strategies that teach HCWs meditation, breathing exercises, and stress-monitoring tools. These strategies can modulate the nervous system response and facilitate resilience and a sense of ease.

3. **Institutional advocacy:** Coaches support institutional advocacy by providing a confidential forum to listen to concerns of HCWs, relaying these concerns anonymously to management and hospital leadership, and reinforcing the availability of institutional supports.

4. **Providing resources:** Coaches share psychoeducational resources with the teams for relevant online mental health supports, including provision of a developed *Diversions in a Time of Social Distancing* guide consisting of a curated list of online exercises, wellness activities, creative arts projects, entertainment recommendations, and relevant reading materials.

5. **Tripartite coping:** Coaches incorporate the strategies of emotion-focused, problem-focused, and meaning-focused coping.[35] Emotion-focused coping includes emotional processing, acceptance and normalization of one's vulnerability, and social support. Problem-focused coping involves self-care strategies, psychoeducation regarding mass trauma, enhancing professionalism, and addressing practical concerns. Meaning-focused coping includes reflection on the reasons for choosing to become an HCW and motivating factors during these challenging times.

6. **BRITE:** Coaches build upon an established organizational program, BRITE™ (Building Resilience within Institutions Together with Employees),[36] which aims to cultivate resilience through flexible mindfulness micro-practices in six domains: Fundamentals, Self-Awareness, Connectedness, Self-Regulation, Perspective, and Optimism.

CREATE Implementation

CREATE was implemented during the first wave of the pandemic in Ontario (Figure 1). The data presented on the implementation phase cover March 27 to June 19, 2020. PSCs logged quantitative administrative and qualitative process data after each interaction with teams.

Description of Service Operations

Thirteen PSCs were paired with 13 clinical managers, each of whom was responsible for covering 1 to 4 inpatient or ambulatory services, supporting a total of 27 HCW teams. The coaches were predominantly psychiatrists (69%); all allied health coaches had training to provide psychotherapy (Table 1). In the event that any of the PSCs became infected or required quarantine for Covid-19, other PSCs were recruited to provide coverage as needed. Support was provided to 10 inpatient floors, 8 outpatient clinics, 4 oncology services, 4 treatment units, and 1 team of staff hired or redeployed from research for Covid-19 screening at hospital entrances.

Table 1. Description of the CREATE Intervention

No. of PSCs	13 (100%)
Psychiatrists	9 (69%)
Psychologist	1 (8%)
Occupational therapist	1 (8%)
Spiritual care	1 (8%)
Music therapy	1 (8%)
Duration of intervention (min)	
Mean and standard deviation	31.24 ± 22.07
Range	10-120
No. of intervention participants	
Mean and standard deviation	9.78 ± 8.87
Range	1-50
Location of interaction (no. of interactions)	
In person	124 (71.7%)
Remote	34 (19.7%)
In person and remote	15 (8.7%)
Type of interaction* (no. of interactions)	
Remote contact (phone/e-mail)	18 (10.2%)
Safety huddle	92 (52.0%)
Specific well-being meeting	37 (21.0%)
Drop-in session	12 (6.8%)
Other routine team meetings	18 (10.2%)
Department/unit (no. of departments/units)	
Inpatient floors: oncology beds, Covid-19 units	10 (37.0%)
Outpatient clinics: breast, lung, brain, haematology, head & neck/endocrine, gastrointestinal, genitourinary, gynecologic	8 (29.6%)
Oncology services: palliative care, psychosocial oncology, dental, clinical trials	4 (14.8%)
Treatment units: radiation therapy, chemotherapy daycare, transfusion, urgent care	4 (14.8%)
Hospital screeners	1 (3.7%)

*Numbers do not add up to 173 interactions as multiple responses could be selected. Source: The authors.

The total number of CREATE interactions was 173. On average, team interventions lasted approximately 30 minutes, consisted of 10 HCW participants, and occurred weekly (Table 1). The disciplines of participants served by the intervention were predominantly nurses and administrative staff, with physicians, redeployed staff (responsible for screening at hospital entrances), radiation therapists, occupational therapists, physiotherapists, and dental hygienists also participating in smaller numbers. The majority of interventions (71.7%) took place in person, but a combination of remote methods was also utilized. Most interventions (52.0%) were incorporated into the routine clinical workflow of teams' daily safety huddles, an institutional standard that had been established prior to the pandemic. A substantial minority of interactions (21.0%) were specifically scheduled well-being meetings, organized in response to pandemic-related concerns raised by HCW teams (Table 1).

> *CREATE pairs PSCs with clinical managers to enhance engagement within hospital teams and to support managers in addressing their teams' psycho-emotional concerns."*

By June 2020, all HCW teams (except for the hospital entrance screeners) shifted from regularly scheduled CREATE interactions to as-needed sessions, which continued over the summer and during the second pandemic wave beginning in September 2020 (Figure 1).

Description of Team Needs and Interventions Provided

Information regarding team needs and the CREATE interventions that were used to address such needs are described in Table 2. Needs identified by the PSCs could be categorized into physical, social, psychological, and spiritual dimensions in accordance with a phenomenological theoretical model developed through structural existential analysis by Van Durzen[37] and Binswanger.[38] These four dimensions are a framework for understanding human experience in terms of existential meaning-making. Core interventions included the provision of reflective spaces for staff to voice their needs and the facilitation of peer support through normalization and validation of concerns within each team.

Physical needs (14.5%) included concerns related to personal safety, welfare, or redeployment. Teams discussed their concerns about contracting Covid-19, inadequate physical space to safely distance, failed patient screenings at the hospital entrance, knowledge gaps regarding positive Covid-19 tests, PPE access, and adjusting to rapidly changing policies. Concerns about individual welfare included increased workloads, longer shifts, virtual care fatigue, and training for redeployment to high-acuity units. Specific strategies to address these concerns were having PSCs align with HCWs by bringing their concerns to hospital leadership and responsively providing team debriefings for critical events such as unanticipated Covid-19 exposures.

Social needs (28.4%) included concerns about family, changing or stressful team dynamics, and organizational justice. Team members struggled with parenting demands, disconnection from family, and fear of infecting at-risk family members or patients while being an asymptomatic carrier. Stressful team dynamics were commonly related to unequal workloads, abrupt changes in team membership, and perceived lack of organizational transparency. Effective strategies for ameliorating these concerns included ensuring staff awareness of organizational supports and encouraging transparency and recognition of respective work tasks within the clinical teams.

Psychological needs (46.2%) included concerns around coping and resilience as well as the identification of those with high emotional distress who were in need of individual therapy. Anxiety, irritability, demoralization, depression, insomnia, fatigue, and other somatic symptoms were noted. HCWs shared their fears of the uncertainty of Covid-19, with some individuals noting a reactivation traumatic distress from their experience with the SARS pandemic. PSCs encouraged HCWs to learn from their regular experience with oncology patients, who cope with the emotional distress and uncertainty of living with cancer.

Finally, HCWs reported spiritual concerns (10.9%), including sympathetic distress over their patients' well-being and moral distress when pandemic requirements forced them to act in ways that conflicted with their own value systems.[39,40] Many staff were distressed by the expectation that they enforce a no-visitor policy, which was a dramatic shift from the usual open visitor policy and their instincts as HCWs. Team members described concerns about their own mortality as

Table 2. Description of Team Needs and Interventions Provided

Frequency of Existential Category	Team Concerns	Interventions Provided	Qualitative Example
Physical (14.5%)	• Personal safety • Personal welfare • Redeployment	• Normalization/validation of distress • Provide reflective space • Organizational advocacy • COVID-19 information provision • Respond to destabilizing event	**Issue:** Covid-19–positive patient missed during door screening; treatment staff exposed **Response:** Provision of same-day debriefing, validation of distress balanced by de-catastrophizing (high standards of hospital infection control, low risk of adverse outcomes, resonance with the risks that patients with cancer live with daily), organizational advocacy to make face shields standard for staff on all treatment units
Social (28.4%)	• Family safety and welfare • Team dynamics • Organizational justice	• Normalization/validation of distress • Enhance team cohesion and connectedness • Foster organizational supportive culture • Promote sense of team efficacy • Provide reflective space	**Issue:** Denial of requests for leave from work due to at-risk dependents or lack of childcare; perception of the institution as being "uncaring" **Response:** Normalize distress within the team, emphasize that institutional safeguards make hospitals safer than public venues, linkage to volunteer resources for HCW childcare, provision of tripartite coping that is problem-focused (i.e., a leave may be beyond our control, but capable use of PPE and hygiene by the team is within our control) and meaning-focused (i.e., essential workers in health care are engaged in a heroic calling)
Psychological (46.2%)	• Coping and resilience • Emotional distress • Individual support and triage	• Psychoeducation • BRITE exercises • Containment of specific distress (anger, fear, sadness) • Promote sense of self-efficacy • Promote hope and optimism • Provide reflective space • Creative arts strategies • Referral for individual support	**Issue:** Emotional distress on the part of an elderly patient undergoing chemotherapy whose husband died of Covid-19, which had been contracted when the husband assumed all daily tasks (e.g., shopping, etc.) in order to protect her, leaving her grieving and without a caregiver during her remaining cancer treatment **Response:** Provide space to process sadness, facilitate mindfulness-based stress reduction techniques, remind HCW of their skills and resources in supporting patients with cancer; provide psychoeducation on burnout and preventative self-care techniques
Spiritual (10.9%)	• Concern about patients • Moral distress	• Normalization/validation of distress • Provide reflective space • Educating staff on supportive counselling for patients • Creative arts strategies	**Issue:** Staff members distressed about being required to enforce organization's no-visitor policy for patients **Response:** Validate that this policy challenges HCW values; assisting staff in aligning with the patient and sharing shared feelings helpless and frustration over a situation beyond anyone's control instead of positioning themselves as enforcers of the policy

Source: The authors.

well as deriving meaning from their chosen vocations. They expressed feeling more affected by unexpected patient deaths during the pandemic, even when these deaths were not Covid-19 related. Explicitly naming the moral distress and reinforcing their skills to provide emotional care to patients supported the spiritual needs of staff.

Preliminary Impacts

While we are currently still in the midst of the pandemic, we report here on the qualitative data during implementation (from March 27 to June 19, 2020).

> " *The frequency of requested sessions decreased over time, and the prevalence of positive emotional affect increased, from 51% of coached sessions (in March/April [early phase]) to 83% of interactions (in June [late phase]), suggesting a reduction in team-level distress and an increase in team resilience over time.*"

The PSCs recorded the predominant emotional tone of the teams after each interaction, coded as either negative emotional affect (e.g., anxiety, anger, depletion) or positive emotional affect (e.g., feeling engaged, confident, or connected). The frequency of requested sessions decreased over time, and the prevalence of positive emotional affect increased, from 51% of coached sessions (in March/April [early phase]) to 83% of interactions (in June [late phase]), suggesting a reduction in team-level distress and an increase in team resilience over time (Figure 4).

FIGURE 4

Emotional Tone Expressed by HCW Teams Over Time

This figure depicts the emotional tone during CREATE interventions during the data-collection period (March 27 to June 19, 2020). The early phase was March/April 2020, the mid-phase was May 2020, and the late phase was June 2020. The pie charts represent the relative frequency of positive (orange) and negative (red) emotional tone. The word-cloud visualization depicts the emotional tone proportional to its frequency over time.
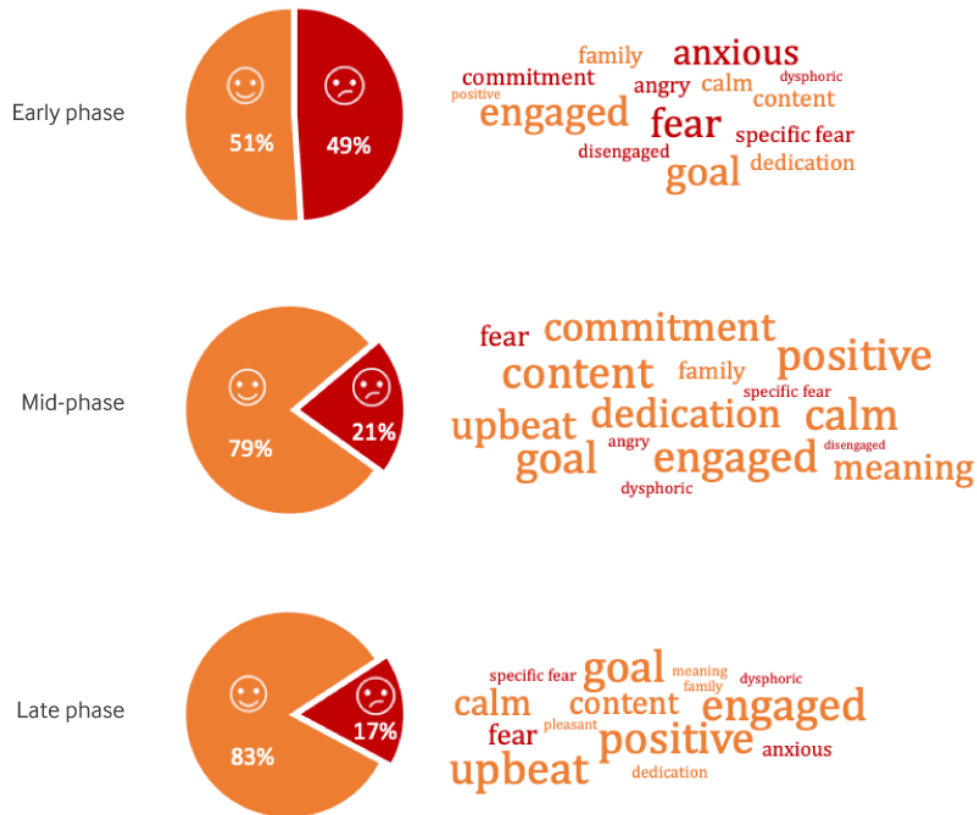
Source: The authors
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CREATE was well-received by participants, was gratifying for the PSCs, and was highly valued by senior hospital leadership. Underscoring the impact of CREATE, additional PSC-coached debriefs have been requested by inpatient clinical managers for significant incidents that impact the safety of patients. The predominant emotional tone in these sessions was one of appreciation for the institutional caring which the presence of CREATE represents.

Embedding Team Support to Build Resilience Among HCWs

There has been an overwhelming demand for the rapid development and implementation of interventions to support the mental health of HCWs.[6,9,10,21,41] However, a mixed-methods systematic review of the Cochrane Database revealed a paucity of quantitative and qualitative studies performed during or after disease epidemics and pandemics that can inform the selection of interventions to improve the mental health and resiliency of HCWs.[21] CREATE augments individual and institutional strategies by incorporating a team-based approach to bolster the mental health of HCWs.[42]

The concerns among HCWs were predominantly in the psychological (46.2%) and social dimensions (28.4%) rather than physical (14.5%) or spiritual concerns (10.9%). This finding is consistent with the preliminary literature demonstrating an elevated prevalence of anxiety, depression, and insomnia among HCWs during the pandemic.[9] Further research is needed to replicate these findings in other institutional settings in which the availability of PPE and the incidence of Covid-19 cases may vary.

> " *The unique strengths of CREATE are that it is a proactive model, it is embedded into the workflows of health care teams, and it is tailored to immediate psychosocial needs and post-pandemic distress.*"

The unique strengths of CREATE are that it is a proactive model, it is embedded into the workflows of health care teams, and it is tailored to immediate psychosocial needs and post-pandemic distress.[17] The preliminary findings following the introduction of the CREATE model indicate that the emotional tone expressed within the HCW teams became more positive over time. The CREATE model is also distinct in addressing the mental health needs of HCWs working directly and indirectly with Covid-19 patients. The use of existing psychosocial staff is another strength in that it allows for a rapidly mobilized, cost-effective model, although this attribute also may limit the generalizability of this intervention to centers where such specialized resource are not available. Other limitations are that CREATE has not yet been examined in settings such as the intensive care unit or emergency department and that nurses and allied HCWs were more likely than physicians to attend team interventions. Future research is needed to evaluate these longer-term effects and to establish which components of CREATE are the most "active ingredients" that contribute to the effectiveness of the intervention.

CREATE has continued to be available to HCW teams as needed, with substantially reduced frequency over the summer and through the beginning of the second wave. The reduced demand for CREATE among some teams may be related to adaptation to the Covid-19 pandemic (i.e., a "new normal"). Alternatively, the knowledge that supports are available might be reassuring to HCWs and increase their feelings of preparedness and self-efficacy. By January 14, 2021, new daily case counts in Ontario are approximately five times greater than at the peak of the first wave,[1] and

Ontario has declared a second provincial emergency lockdown. Our team has rapidly mobilized CREATE to resume proactive, regularly scheduled team support sessions.

Covid-19 vaccination became available at our institution on December 15, 2020; however, due to limited supply, a prioritization strategy was implemented by the government, with the highest priority being given to the staff and residents in the long-term care sector and frontline Covid-19 HCWs. It is too early to describe what the mental health impact of the availability of vaccination will be, although there have been expressions of both relief and hope. There has been high demand for the vaccines among hospital staff, clear communication from hospital leadership on vaccination priorities, an interesting demonstration of social consciousness among some HCWs in deferring their own vaccination to colleagues at higher risk, and some frustration related to the limited supply.

CREATE was designed to ameliorate the mental health burden on HCWs in the context of the Covid-19 pandemic. The rapid mobilization of CREATE within weeks after the Covid-19 pandemic declaration conveyed a meaningful message that the institution values HCWs and is commiteed to their well-being. Institutional pandemic response planning for the mental health needs of its employees should include interventions at the organizational level, as well as at HCW teams and individuals. The CREATE model lends itself to be adapted and delivered by other institutions during Covid-19 and applied to future pandemics.

Mary Elliott and Madeline Li are co-senior authors of this paper.

Gilla K. Shapiro, MA(Cantab), MPP/MPA, PhD, C. Psych
Psychologist, Princess Margaret Cancer Centre and Global Institute of Psychosocial, Palliative and End-of-Life Care (GIPPEC), University of Toronto, Toronto, Ontario, Canada

Christian Schulz-Quach, MSc, MA, MD
Psychiatrist, Princess Margaret Cancer Centre, Department of Psychiatry, Faculty of Medicine, University of Toronto, and Global Institute of Psychosocial, Palliative and End-of-Life Care (GIPPEC), University of Toronto, Toronto, Ontario, Canada

Andrew Matthew, PhD, C. Psych
Psychologist, Princess Margaret Cancer Centre and Department of Surgery and Psychiatry, Faculty of Medicine, University of Toronto, Toronto, Ontario, Canada

Pamela Mosher, MD, MDiv
Psychiatrist, Princess Margaret Cancer Centre and Department of Psychiatry, Faculty of Medicine, University of Toronto, Toronto, Ontario, Canada

Gary Rodin, MD
Psychiatrist, Princess Margaret Cancer Centre, Department of Psychiatry, Faculty of Medicine, University of Toronto, and Global Institute of Psychosocial, Palliative and End-of-Life Care (GIPPEC), University of Toronto, Toronto, Ontario, Canada

Froukje de Vries, MD, PhD
Psychiatrist, Princess Margaret Cancer Centre and Global Institute of Psychosocial, Palliative and End-of-Life Care (GIPPEC), University of Toronto, Toronto, Ontario, Canada Netherlands Cancer Institute, Amsterdam, The Netherlands

Sarah Hales, MD, PhD
Psychiatrist, Princess Margaret Cancer Centre, Department of Psychiatry, Faculty of Medicine, University of Toronto, and Global Institute of Psychosocial, Palliative and End-of-Life Care (GIPPEC), University of Toronto, Toronto, Ontario, Canada

Chana Korenblum, MD
Adolescent and Young Adult Specialist, Princess Margaret Cancer Centre, The Hospital for Sick Children, and Department of Pediatrics, Faculty of Medicine, University of Toronto, Toronto, Ontario, Canada

SarahRose Black, RP, MTA, PhD
Psychotherapist and Music Therapist, Princess Margaret Cancer Centre and Faculty of Music, University of Toronto, Toronto, Ontario, Canada

Lydia Beck, MScOT
Occupational Therapist, Princess Margaret Cancer Centre and Department of Occupational Science and Occupational Therapy, Faculty of Medicine, University of Toronto, Toronto, Ontario, Canada

Kim Miller, MD
Psychiatrist, Princess Margaret Cancer Centre and Department of Psychiatry, Faculty of Medicine, University of Toronto, Toronto, Ontario, Canada

Jody Morita, MD
Psychiatrist, Princess Margaret Cancer Centre and Department of Psychiatry, Faculty of Medicine, University of Toronto, Toronto, Ontario, Canada

Madeline Li, MD, PhD
Psychiatrist, Princess Margaret Cancer Centre and Department of Psychiatry, Faculty of Medicine, University of Toronto, Toronto, Ontario, Canada

Mary Elliott, MD
Psychiatrist, Princess Margaret Cancer Centre and Department of Psychiatry, Faculty of Medicine, University of Toronto, Toronto, Ontario, Canada

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