Cancer care team functioning during the coronavirus 19 pandemic and beyond:

A mixed method study

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Dedication

In loving memory of my mother, who bravely battled cancer with unwavering resilience for seven exhausting years,

To every person touched by cancer, for their strength and courage that inspire us all,

To my father and sister, for their endless unconditional love and support,

To my children, my heart and soul, Catherine, Raymond, and my sweetest Karen,

To my husband, Georges, for his relentless encouragement to strive for excellence,

To my supervisor and mentor Prof. Carmen G. Loiselle who believed in me since day one, walked each step with me, and reminded me that the busiest people are often the most efficient, dedicated, and willing to make time for what truly matters,

To my dearest friends whose genuine presence made this journey lighter

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Abstract

With the rapidly evolving and demanding nature of cancer treatment and overall care (e.g., new treatment options, distinct patient profiles and needs, higher caseloads, changes in clinical practice recommendations, and staff shortages), cancer care teams often report feeling ill-equipped to meet new demands. The COVID-19 pandemic posed additional challenges, both short and long-term, including significant work-related disruptions, rapid shifts in practices, as well as workforce resignation. Within this context, it is crucial to better understand cancer care team functioning during acute crises such as the pandemic and identify factors that may predict optimal functioning. This dissertation work aimed to 1) Identify key features of cancer team functioning during health crises through an in-depth narrative review, 2) Measure multi-stakeholder perceptions of team functioning during COVID-19 and through its transition and document if patient perceptions of team functioning are significantly associated with their cancer care experiences, and 3) Identify key contributors to optimal team functioning as perceived by the diverse stakeholders queried.

Accordingly, the dissertation comprises three manuscripts, addressing the aforementioned research objectives. Manuscript #1 titled "**Cancer care team functioning during COVID-19: A narrative literature review and synthesis**" (Published in *Current Oncology*) provides a comprehensive overview of the existing literature on specific cancer team functioning attributes during the COVID-19 pandemic. Three themes were identified as key to overall cancer care team functioning during this period: 1) Swiftly adopting virtual technology for communication and interprofessional collaboration, 2) Promoting team resilience, and 3) Encouraging self-care and optimizing team support. Manuscript #2 titled "**Measuring team functioning during the COVID-**

19 pandemic: perspectives of cancer care team members” (submitted to the *Journal of Multidisciplinary Healthcare*), reports on multi-stakeholder perceptions regarding key indicators of team functioning: Team Effectiveness (TE) and Team Relational Coordination (TRC) during COVID-19 (T1) and while transitioning out of the pandemic (T2). In addition, potential associations between patient perceptions and their cancer care experiences are explored. Overall, participants (N = 66) representing four distinct groups (i.e., 13 healthcare professionals, 40 patients, 6 informal caregivers, and 7 volunteers), were recruited from two outpatient cancer clinics at a large University-affiliated hospital, in Montréal, Qc, Canada, and invited to complete the study e-measures at T1 (N = 66) and T2 (n = 44). At T1, participants reported high perceptions of Team Effectiveness (scale 1 to 6) M = 4.47; SD = 0.71 (Mdn = 4.54; IQR: 4.06-5) and Relational Coordination (scale 1 to 5) M = 3.77; SD = 0.77 (Mdn = 3.81; IQR: 3.12-4.38). Perceptions were relatively unchanged while transitioning out of the pandemic and no significant differences across the stakeholder groups were found. Interestingly, at both time points, patient perceptions were positively correlated with their experience with cancer care (Spearman rank correlation ranging from 0.69 to 0.83; $p < 0.01$)

Manuscript #3 titled “**Using fuzzy cognitive mapping to explore stakeholders’ mental models of cancer team functioning during COVID-19 and beyond**” (submitted to the *International Journal of Care Coordination*), explored multi-stakeholders’ perceptions of attributes contributing to cancer care team functioning during and while transitioning out of the pandemic and beyond. Thirteen participants (i.e., 5 HCPs, 3 patients, 2 informal caregivers and 3 volunteers) took part in separate fuzzy cognitive mapping virtual sessions which consisted of creating mental model maps for optimal cancer team functioning. These sessions lasted for an hour each while participants collaboratively identified factors linked to optimal functioning, defined relationships between various factors, and assigned weights to determine the extent of influence these relationships had on team functioning. Combining the distinct maps from each stakeholders' group led to a shared mental model pinpointing the five strongest attributes related to optimal team functioning: Effective communication, enhanced cancer care experiences, the philosophy of care (i.e., empathy, compassion, respect), support for patients and HCPs' psychosocial needs and role clarity of cancer care team members.

Taken together, this dissertation work provides much-needed data on cancer team functioning during the pandemic and beyond. More specifically, the series of studies provide quantitative and qualitative evidence to support the integration of multi-stakeholder input in co-creating guidelines for optimal cancer team functioning when facing significant challenges such as a pandemic. Insights gained underscore the need to expand existing conceptual frameworks related to cancer team functioning and re-examine healthcare priorities for enhanced team functional preparedness for future pandemics. Comprehensive and standardized assessments would then further inform, monitor, and guide team functional improvements. The COVID-19 pandemic has undeniably reshaped the landscape of healthcare, offering critical lessons for cancer teams, and shedding light on key insights that can serve to optimize team functioning. In sum, findings herein provide valuable insights to build back more resilient teams post-pandemic and beyond.

ABRÉGÉ

Compte tenu de l’évolution rapide et de la nature exigeante des soins courants en cancérologie (p. ex., nouvelles options de traitement, profils et besoins distincts des patients, charge de travail plus élevée, changements en pratique clinique et pénuries de personnel), les équipes de soins se sentent souvent mal outillées pour répondre à ces nouveaux défis. La pandémie de COVID-19 pose aussi des défis considérables, à court et à long terme, notamment d’importantes perturbations liées au travail, des changements rapides dans les pratiques ainsi que des réductions de la main-d’œuvre. Dans ce contexte, il est important de mieux comprendre le fonctionnement des équipes de soins en cancérologie lors des pandémies et d’identifier les facteurs qui peuvent prédire un fonctionnement optimal. Cette thèse de doctorat visait à: 1) Identifier les caractéristiques clés du fonctionnement de l’équipe de soins en cancérologie pendant les crises sanitaires grâce à une synthèse narrative de la littérature, 2) Mesurer les perceptions des parties prenantes du fonctionnement des équipes pendant la COVID-19 et dans sa transition, et évaluer si les perceptions des patients à l’égard du fonctionnement de l’équipe sont significativement associées à leurs expériences de soins, et 3) identifier les attributs clés du fonctionnement optimal de l’équipe, tels qu’ils sont perçus par les participants interrogés.

En conséquence, la thèse comprend trois manuscrits, chacun répondant aux objectifs de recherche susmentionnés. Le manuscrit #1 intitulé « **Fonctionnement de l’équipe de soins en cancérologie pendant la COVID-19 : une littérature et synthèse narrative** » (Publié dans *Current Oncology*), fournit un aperçu de la littérature existante sur les caractéristiques spécifiques du fonctionnement des équipes en cancérologie pendant la pandémie de COVID-19. Trois thèmes ont été identifiés comme étant essentiels au fonctionnement global de l’équipe de

soins contre le cancer au cours de cette période : 1) l'adoption rapide de la technologie virtuelle pour la communication et la collaboration interprofessionnelle, 2) la promotion de la résilience de l'équipe, et 3) l'encouragement à prendre soin de soi et l'optimisation du soutien de l'équipe. Le manuscrit #2 intitulé « **Mesurer le fonctionnement des équipes au cours de la pandémie COVID-19: points de vue des membres de l'équipe de soins en cancérologie** » (soumis au *Journal of Multidisciplinary Healthcare*) rend compte des perceptions des participants concernant les indicateurs clés du fonctionnement de l'équipe : Efficacité de l'équipe et la coordination relationnelle de l'équipe pendant la COVID-19 (T1) et pendant la transition hors de la pandémie (T2). De plus, les associations potentielles entre les perceptions des patients et leurs expériences de soins en cancérologie sont explorées. Dans l'ensemble, les participants (N = 66) représentant quatre groupes (13 professionnels de la santé, 40 patients, 6 aidants naturels et 7 bénévoles) ont été recrutés dans deux cliniques externes de cancérologie d'un hôpital universitaire à Montréal (Québec, Canada), et invités à compléter les questionnaires auto-rapportés à T1 (N = 66) et T2 (n = 44). À T1, les participants ont fait état d'une perception élevée de l'efficacité de l'équipe (échelle de 1 à 6) M = 4.47 ; ET = 0.71 (Mdn = 4.54 ; EIQ : 4.06-5) et coordination relationnelle (échelle de 1 à 5) M = 3.77 ; ET = 0.77 (Mdn = 3.81 ; EIQ : 3.12 à 4.38). Les perceptions sont demeurées relativement inchangées pendant la transition, et aucune différence significative n'a été constatée entre les quatre groupes. Il est intéressant de noter qu'aux deux moments, les perceptions des patients étaient positivement corrélées à leur expérience des soins (corrélations de Spearman allant de 0.69 à 0.83 ; $p < 0.01$)

Manuscrit #3 intitulé « **Utilisation de la cartographie cognitive pour explorer les modèles mentaux des parties prenantes du fonctionnement de l'équipe de cancérologie pendant et**

après la COVID-19 » (soumis au *International Journal of Care Coordination*), explore les perceptions des intervenants sur les attributs contribuant au fonctionnement de l'équipe de soins en cancérologie pendant COVID-19 et en transition. Treize participants (5 professionnels de la santé, 3 patients, 2 aidants naturels et 3 bénévoles) ont pris part à des séances virtuelles distinctes de cartographie cognitive qui consistent à créer des cartes de modèles mentaux pour un fonctionnement optimal de l'équipe en cancérologie. Ces séances (d'une durée approximative d'une heure chacune), au cours desquelles les participants ont identifié les facteurs liés au fonctionnement optimal, ont servi à cerner les relations entre divers facteurs. Des pondérations furent attribuées quant à la force de l'influence des relations sur le fonctionnement de l'équipe. La combinaison des cartes distinctes de chaque groupe a conduit à un modèle mental partagé identifiant les cinq attributs les plus forts liés au fonctionnement optimal de l'équipe : Une communication efficace, des expériences améliorées en matière de soins, la philosophie de soins (c.-à-d. empathie, compassion, respect), un soutien aux besoins psychosociaux des patients et des professionnels de santé et une clarté du rôle des membres de l'équipe.

Dans l'ensemble, cette thèse fournit des données indispensables sur le fonctionnement de l'équipe de cancérologie pendant et au-delà de la pandémie. Elle fournit aussi des évidences quantitatives et qualitatives à l'appui de l'intégration des perceptions de plusieurs parties dans la cocréation de lignes directrices pour un fonctionnement optimal des équipes alors qu'elles font face à des défis importants tels qu'une pandémie. Les connaissances acquises soulignent la nécessité d'élargir les cadres conceptuels existants liés au fonctionnement de l'équipe et de réexaminer les priorités en matière de soins afin d'améliorer la préparation de l'équipe quant aux futures pandémies. Des mesures standardisées permettraient ensuite d'informer, de suivre et d'orienter les améliorations fonctionnelles de l'équipe. La pandémie de COVID-19 a certainement remodelé le paysage des soins révélant des leçons essentielles pour les équipes, et de l’information clé qui peut servir à optimiser leur fonctionnement. Les résultats présentés ici fournissent des pistes précieuses afin de construire des équipes futures plus résilientes.

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Last, and most important, I would like to thank the 66 participants who agreed to take part in this research. The extensive work would not have been possible without their precious time and contributions.

Contributions of authors

As a doctoral candidate, I, Samar Attieh, was responsible for the conceptualization, literature review, implementation, analysis, and writing of the thesis under the regular support of my supervisor, Dr. Carmen G. Loiselle. Dr. Loiselle provided expertise, additional insights, and constructive feedback and played a pivotal role in refining the structure, content, and ramifications of this work. Dr. Loiselle reviewed all dissertation content and was cited as co-authored for the three manuscripts. Drs. Kelley Kilpatrick, Denis Chenevert, and Marie-Pascale Pomey provided valuable feedback on the dissertation work at annual doctoral meetings, reviewed and co-authored manuscript #2 (Chapter 2). Dr. Kilpatrick reviewed the manuscript #1 (Chapter 1) and was acknowledged. Dr. Ivan Sarmiento coached me on data analysis for the fuzzy cognitive maps. He reviewed and co-authored manuscript #3 (Chapter 3).

Contributions to original knowledge

The dissertation work provides several contributions to advancing knowledge in the field of cancer care in the following ways:

1. Pioneering a comprehensive mixed-method exploration of cancer team functioning amidst the COVID-19 pandemic
2. Expanding the scope of evidence on team functioning by exploring the perceptions of diverse stakeholders previously unexplored including patients, informal caregivers, and volunteers
3. Relying on cutting-edge methodologies (e.g., Fuzzy cognitive mapping), to capture key contributors to optimal cancer team functioning during the pandemic and beyond
4. Focusing on mental models to complement “objective” team processes frequently captured by self-report questionnaires
5. Capturing a shared understanding of what constitutes quality cancer care team functioning, which may serve to guide future development of supportive cancer team interventions
6. Contributing to theory, education/training, clinical practice, and further research (discussed and elaborated upon in the dissertation's discussion section in Chapter 4)

List of tables and figures

Chapter 1/Manuscript #1

Chapter 2/ Manuscript #2

Chapter 3/ Manuscript #3

List of abbreviations

COVID-19 Corona Virus Disease 2019

EIQ Écart Interquartile

FCM Fuzzy Cognitive Mapping

HCP Health Care Professional

IPO Infirmière Pivot en Oncologie (pivot nurse)

IQR Interquantile Range

M Mean/Moyen

Mdn Median/Médiane

SARS Severe Acute Respiratory Syndrome

SARS-CoV 2 Severe Acute Respiratory Syndrome CoronaVirus 2

TE Team Effectiveness

TRC Team Relational Coordination

WHO World Health Organization

Introduction and objectives

Current clinical practice guidelines recommend multidisciplinary approaches to cancer care that bring together specialists from various disciplines who work as a coherent team to optimize workflow, illness management processes and outcomes. [1] With rapidly evolving practices and cancer care demands including higher caseloads, various treatment options, distinct patients' needs and preferences and workforce shortages, cancer teams often report feeling ill-equipped to meet these new demands. [2] Recruiting more cancer care professionals is likely to be insufficient to address care complexities and the emphasis must be placed on documenting promising strategies to optimize effectiveness among existing cancer care teams. [3-9]

The COVID-19 pandemic has contributed to unprecedented stressors on cancer care teams. It prompted the transformation of every aspect of cancer care, irrespective of treatment, inpatient or outpatient, or curative intent. The realities of COVID-19 effects on team functioning included a multifold increase in staff distress, burnout, and significantly lower job performance. [10-13] Identifying promising strategies to optimize cancer team functioning and patient experiences has become timelier than ever. The extant literature documents that teams with shared perceptions of what constitutes optimal team functioning are more likely to build a common vision of what is needed to optimize their performance. [14,15] This understanding is referred to as "shared mental model." [16] As a result, clinicians understand care processes in similar ways, develop mutual expectations concerning other members' roles, and acquire shared causal interpretations of existing team functions and malfunctions. [15] Ensuring that cancer teams sustain shared mental models, particularly on how to maintain optimal functioning during challenging times such as pandemics and how to adapt dynamically is thus critical. It is also important to align what constitutes optimal functioning with multi-stakeholders, including patients, informal caregivers, and volunteers. [17-21] In a workshop by the National Cancer Policy Forum (2019) on developing a more effective oncology workforce, integrating informal caregivers into care teams was identified as a priority. [2] Through their supportive role, ranging from assisting with daily activities to navigating complex health care and social service systems, involved family members and friends develop their own expertise on quality care processes. [20-22] Similarly, trained volunteers in oncology have significant supportive roles for patients and family members alike. Considering the value that their experiential knowledge brings forth, the involvement of informal caregivers and volunteers in team functioning research is most timely.

Moving forward, we should explore innovative ways to document multi-stakeholders' views on what constitutes optimal team functioning. There is also an urgent need to provide further evidence on the relationships between patient perceptions of team functioning and their cancer care experiences. Two key concepts for team functioning include team effectiveness (TE) and team relational coordination (TRC).[23-25]Both concepts have risen to the forefront as key determinants of care quality, patient safety, and overall healthcare system efficiency.[26-28]TE and TRC have been primarily documented in chronic care settings and there is a paucity of literature on how serious public health crises such as COVID-19 affect TE and TRC and how this might relate to patient experiences and outcomes. Exploring stakeholders' perceptions of team functioning in a more complex context (i.e., cancer care settings and pandemics) is therefore vital to ensure that systems are optimally responsive in challenging contexts. We are relying, herein, on innovative and mixed-methods approaches to explore cancer care team functioning as perceived by multi-stakeholders implicated in care.

Research questions

The following research questions guided this dissertation work:

- What are the main features of cancer team functioning during pandemics?
- How do various stakeholders perceive cancer team functioning during COVID-19? Do perceptions differ across stakeholders? Are patients' team functioning perceptions related to their cancer care experiences and satisfaction?
- What are the key factors contributing to optimal team functioning as per stakeholder groups?

Objectives

This dissertation work aims to 1) Identify key features of cancer team functioning during health crises through an in-depth narrative literature review, 2) Measure stakeholder perceptions of team functioning (through two main indicators: team effectiveness (TE) and team relational coordination (TRC), 3) Document if patient perceptions of TE/TRC are significantly associated with care experiences, and 4) Identify key contributors to optimal cancer team functioning using Fuzzy Cognitive Mapping.

We address these aims with a series of mixed methods studies combining quantitative and qualitative data. The complementary nature of mixed methods fits our aim to gain a more holistic and nuanced understanding of team functioning.

Preface

The dissertation follows a manuscript-based style, consistent with the requirements and format specified by McGill University Graduate and Postdoctoral Studies. A collection of three scholarly manuscripts is presented, for which I am the first author. Chapter 1 includes the literature review as Manuscript #1. Chapter 2 includes Manuscript #2 which addresses two objectives (i.e., measuring stakeholder perceptions of team functioning (through two main indicators: team effectiveness (TE) and team relational coordination (TRC), and documenting if patient perceptions of TE/TRC are significantly associated with care experiences). The third chapter includes Manuscript #3 addressing the third objective (i.e., identifying key contributors to optimal cancer team functioning using Fuzzy Cognitive Mapping). Chapter 4 includes a discussion of the dissertation's contributions to theory, education, clinical practice, and research and a knowledge translation plan. A reference list follows each section/manuscript, and a complete reference list and appendices are provided at the end of the document.

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Chapter 1: Literature review (manuscript #1)

Title: Cancer care team functioning during COVID-19: A narrative literature review and synthesis

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Abstract

Amid pandemics, health care teams face unprecedented challenges, requiring significant efforts to sustain optimal functioning and navigate rapid practice changes. It is therefore crucial to identify factors affecting team functioning in these contexts. The present narrative review more specifically summarizes the literature on key elements of cancer teams' functioning during COVID-19. The search strategy involved four main databases (i.e., Medline OVID, EMBASE, PsycINFO, and CINAHL), as well as Google Scholar, from January 2000 to September 2022. Twenty-three publications were found to be relevant. Each was read thoroughly, and its content summarized. Across publications, three key themes emerged: (1) swiftly adopting virtual technology for communication and interprofessional collaboration, (2) promoting team resilience, and (3) encouraging self-care and optimizing team support. Our findings underscore key team functioning elements to address in future pandemics. More research is needed to document the perspectives of broader-based team members (such as patients and lay carers) to inform more comprehensive evidence-based team functioning guidelines.

Keywords: Cancer; team functioning; COVID-19; pandemic

Introduction

Clinical guidelines and best practices recommend a well-integrated team-based approach to cancer care that brings together complementary disciplines to optimize team processes, care management, and patient outcomes [1,2]. With the rapidly evolving and demanding nature of cancer care (e.g., higher caseloads, diverse treatment options, distinct needs and preferences of patients), teams often report feeling ill-equipped to meet these demands [3]. Pandemics pose additional challenges on team functioning, including unexpected practice changes, delays in medical procedures, cancellations of treatments, and workforce shortages due to sickness [4]. Pandemics are characterized by community-level outbreaks in at least two countries within a World Health Organization (WHO) region and at least one other country in a different WHO region [5]. In the last two decades, pandemics have mainly involved respiratory viruses, including SARS (severe acute respiratory syndrome) in 2002–2003, H1N1 influenza (swine flu) in 2009–2010, the Ebola outbreak in West Africa in 2014–2016, the Zika Virus outbreak in 2015–2016, and the COVID-19 pandemic (2019–present), considered to be one of the most significant global health crises in recent history, caused by the novel coronavirus SARS-CoV-2. During these challenging times, healthcare professionals (HCPs) have often contended with rapid shifts in clinical practices while striving to provide high-quality and uninterrupted care [4,6]. The incessant stress makes it significantly harder for teams to sustain performance and optimal functioning [7].

In this context, it is critical to understand key elements that affect optimal team functioning during these challenging times [8,9]. The literature shows distinct definitions and measurements of team functioning [10], with team effectiveness and relational coordination as two significant indicators [11,12,13,14,15]. Team effectiveness includes role clarity, trust, communication, coordination, timely care, staff knowledge and skills, and cohesion and problem-solving [11,14]. Team relational coordination is characterized by frequent, timely, accurate, and problem-solving communication and by shared goals, shared knowledge, and mutual respect [12,13]. However, there is a literature gap regarding team effectiveness and relational coordination within cancer care settings and during pandemics. Given the timeliness of this topic, we conducted a narrative review to provide a comprehensive summary of the current literature for a quick uptake. Interestingly, the terms narrative review and literature review are often used interchangeably [16]. In addition, whereas our initial intention was to review the literature that included all types of pandemics, our search only yielded COVID-19-related publications.

Methods

This narrative review was conducted according to the guidelines of Green et al. (2006) [17].

Sources of information

The search strategy involved four main databases (i.e., Medline OVID, EMBASE, PsycINFO, and CINAHL) and Google Scholar.

Search terms and years

Keywords included team functioning, team effectiveness, team relational coordination, cancer, oncology, cancer care, health crisis, outbreak, pandemic, epidemic, and endemic. Keywords and their respective mesh words were combined with Boolean operators and modifiers (e.g., (team functioning OR team effectiveness OR team relational coordination) AND (cancer or oncology) AND (pandemic or endemic or health crisis or outbreak)). The timeline for the search was set from January 2000 to September 2022.

Publications selection criteria

Eligible publications focused on elements linked to cancer teams' functioning during the COVID-19 pandemic. Special publications, such as commentaries, perspectives, reports, and contributions without quantitative or qualitative data, were included if they provided an important forum for the cancer teams' experiences during the pandemic. Publications that were not directly relevant to cancer settings or to team functioning during the pandemic were excluded. Publications written in languages other than English or French also were excluded.

Data synthesis

As per Green et al. (2006) [17], the first author (S.A.) read through each retained publications and took notes. A table was created with a synopsis of the contents and notes relevant to cancer care team functioning during the pandemic. The synopses were then reviewed, and publications with similar concepts were grouped, forming three tables. Some publications were included across tables if their content was relevant to more than one concept. Next, S.A. reviewed the synopses within each table and generated themes accordingly.

Results

A total of 3111 publications were retrieved from the databases, with the following breakdowns: Medline OVID (1161), Embase (998), PsycINFO (687), CINAHL (25), Google Scholar (241). Among these, 1257 duplicates were excluded, while 1856 were assessed for eligibility. After reading the abstracts, 1726 publications were excluded because they were not related to a pandemic. The remaining 128 were assessed by reading the full texts; 105 were not relevant to cancer care teams' functioning or experiences during the pandemic and were excluded. The process resulted in 23 publications deemed suitable for inclusion. The PRISMA flowchart [18] in Figure 1 describes the various steps taken for identifying relevant publications.

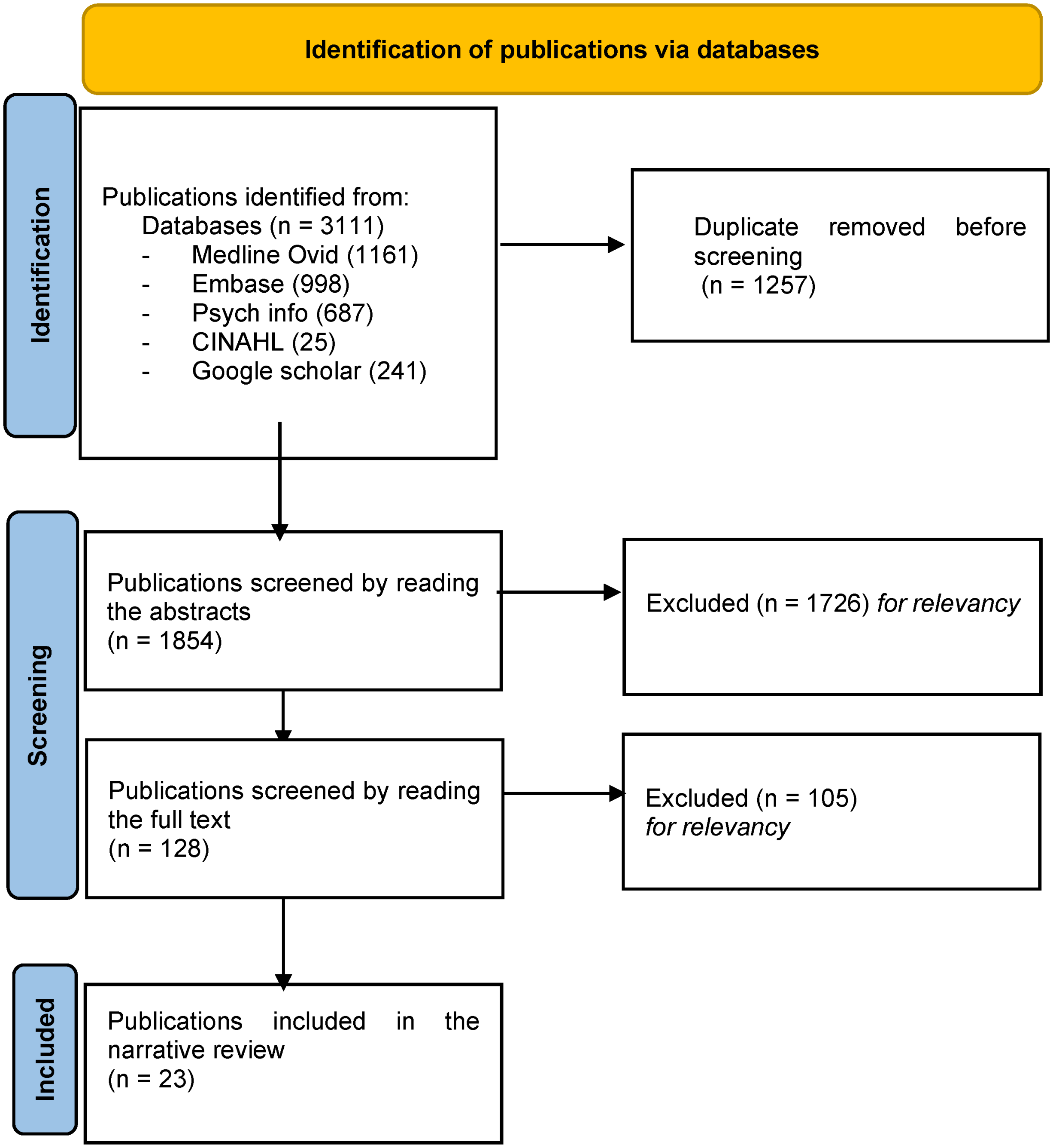

Figure 1. Flow chart of the publications' selection

All 23 retained publications addressed the COVID-19 pandemic. Of these, seven publications with primary sources were identified (i.e., original research with quantitative, qualitative, or mixed designs), along with one literature review, thirteen special publications (i.e., commentaries, editorial pieces, reports), and two study protocols. The main characteristics of the retained publications are presented in Table 1.

Author/ year	Type	Objective(s)	Participants
Banerjee et al., 2021[19]	Original	To investigate wellbeing, burnout, and job performance in oncology over time since COVID-19	N = 1520 oncology professionals
Mohamedbhai et al., 2021[20]	Original	To evaluate the effect of virtual head and neck multidisciplinary team meetings on the functioning of the team	N = 97 head and neck cancer team members (i.e., oncologists, nurses, pathologists, radiologists, dieticians, speech and language therapists)
Turner et al., 2022[21]	Original	To explore oncology healthcare professionals' experiences with telehealth implementation during the COVID-19 pandemic	N = 40 healthcare professionals in oncology (physicians, advanced practice providers, social workers, psychologists, dieticians, pharmacists)
Marshall et al, 2022[22]	Original	To explore the impact of COVID-19 on oncology healthcare professionals	N = 30 (registered and advanced practice nurses, oncologists, pharmacist, mental health counselor, genetic counselor)
Perlmutter et al., 2022[23]	Original	To identify the keys to success and common pitfalls associated with virtual multidisciplinary meetings	N = 253 (surgeons, nurses, advanced practice providers, residents, fellows)
Hlubocky et al., 2021[6]	Original	To describe the occupational and personal consequences of the COVID-19 pandemic on oncologist wellbeing and patient care.	N = 25 oncologists

Standiford, 2020 [24]	Original	To explore the attributes and techniques that were important to effectively lead during a crisis.	N = 16 physicians
Paterson et al., 2020[25]	Literature review	To explore the role of telehealth during the COVID-19 pandemic across the interdisciplinary cancer care team	N/A
Tremblay et al., 2022[26]	Protocol	To better understand how a multi-component intervention builds resilience in oncology teams	
Chenevert et al., 2022[27]	Protocol	To evaluate a participatory interventional approach that fosters team resilience, seeks to determine whether enhanced resilience improves team mental health status and organizational outcomes.	
Boparai et al., 2021[28]	Special/Knowledge exchange article	To discuss how oncology social workers in Australia have adapted to the challenges of providing support to cancer patients during the COVID-19 pandemic	Social workers
Anderson et al., 2020[29]	Special/ Commentary	To describe the experience of a cancer centre radiation therapy services during the preliminary stages of the COVID-19 pandemic	N/A
Besson et al., 2020[30]	Special/ Commentary	To examine the rationale for and methods of adapting a robust continuing professional development program and training for radiation therapists	N/A
Farah et al., 2021[31]	Special/Report	To identify the views of stakeholders on strategies to build healthcare resilience for future health threats	Patients, oncologists, researchers, and healthcare system representatives
Shah et al., 2020[32]	Special/Report	To highlight the transformation underwent in a busy oncology care department to prepare for the COVID-19 crisis	N/A
Davies et al., 2020[33]	Special/Clinical correspondence	To discuss measures in place to support oncology staff throughout the COVID-19 pandemic.	Oncology team members
Soukup et al., 2021[34]	Special/Editorial piece	To present lessons learned from a cancer collaborative group during COVID-19	N/A

Ngoi et al., 2020[35]	Special/Editorial piece	To present a segregated-team model to maintain cancer care during the COVID-19 outbreak	N/A
Ueda et al., 2020[36]	Special/Special feature	To highlight the importance of organizational structure, preparation, agility, and a shared vision amid the global pandemic	N/A
Tallec et al., 2022[37]	Special/Brief communication	To highlight the needs of the teams and radiation therapists in the event of crisis	N/A
Jazieh et al., 2020[38]	Special article	To present recommendations that may improve understanding of COVID-19's effect on cancer care and increase readiness to manage future outbreaks effectively	N/A
Rosa et al., 2022[39]	Special/Essay	To describe the principles underlying a meaning centered team level intervention to ameliorate burnout among HCPs during a health crisis	N/A
Reynolds et al., 2020[40]	Special/Perspectives	To describe teamwork and resilience in a haematology/oncology department treating patients with COVID-19	Oncology team members

Table 1: Publications characteristics (N = 23)

Three main themes were identified based on the in-depth review of the retained publications: (1) swiftly adopting virtual technology for communication and interprofessional collaboration, (2) promoting team resilience, and (3) encouraging self-care and optimizing team support. The publications' synopses and associated theme(s) are presented in Table 2, Table 3, and Table 4.

Author/ year	Theme 1: Swiftly adopting virtual technology for communication and interprofessional collaboration
Mohamedbhai et al., 2021 [20]	• 58.8% believed that HCPs' communication during virtual meetings was worse than in person • 69.1% believed that interpersonal relationships and teamworking had deteriorated since moving to virtual meetings • 43.9% felt that interprofessional engagement had decreased • 47.7% reported that training was worse in virtual than in in-person • 70% (junior trainees) felt that training had deteriorated since transitioning to virtual

	• Solutions needed to address the deficiencies in engagement, training, teamworking, and communication
Turner et al., 2022[21]	• Easier to coordinate care with other HCPs virtually • Virtual technology: collaboration within the same institution and beyond institution • More resources needed to ensure consistency and professional conduct of meetings
Perlmutter et al., 2022[23]	• Virtual board meetings: lack of opportunity to network with colleagues, connectivity issues • Hybrid model to address virtual meetings challenges (i.e., combining virtual meetings with an in-person component) • Meetings leadership reinforces engaged interprofessional participation
Standiford, 2020[41]	• Pandemic created unique circumstances for team collaboration/made high-quality communication a necessity • Pandemic challenged typical interprofessional communication practices with HCPs/ HCPs overwhelmed by electronic communication • Opportunity to work in multidisciplinary teams and learn from colleagues (not normally interacted with pre-pandemic)
Paterson et al., 2020[25]	• Telehealth and virtual technology/more effective and sustainable models of care • Benefits and limitations of virtual technology need careful consideration • Need for appropriate HCPs training and education • Virtual cancer multidisciplinary team meetings/a pragmatic interprofessional approach, timely and safe • More engagement from allied professionals possible virtually/ providing high-quality advice to teams • Telehealth's functionality, brings together expert clinicians and carers (even if geographically dispersed), facilitates interprofessional collaboration, which is known to improve clinical performance, patient outcomes, and patient satisfaction • HCPs curriculum development needed in undergraduate and postgraduate studies
Boparai et al., 2021[28]	• Ongoing change in communication forums during pandemic • HCPs’ challenge in understanding and implementing large amounts of information on a daily basis • Challenge of adaptation to different communication modes
Anderson et al., 2020[29]	• Creation of ‘siloed’ teams significantly impacted traditional forms of communication • Workforce communication strategy: replace face to face with virtual • Regular interactive staff briefing to communicate planning and decisions

	• Information technology infrastructure • Staff education to support remote access to all resources
Farah et al., 2021[31]	• Pre-pandemic attempts to implement virtual technology to address space constraints/ challenging • During pandemic, HCPs committed to rapid change in communication, work, and collaboration when faced with urgency • Rapid transition to virtual care • Benefits of virtual technologies: relieve some space/time constraints, tumor boards easier to attend • Challenges of virtual technologies: clerical burden, less interaction with colleagues
Shah et al., 2020[32]	• Changes in operating procedures pertaining to communication • Development of a regular line of communication among division leaders through video conferencing • Daily leadership video conference call between professionals • HCPs adaptations centered around communication and coordination within team and external • Virtual meetings benefits: cohesive team/HCPs with sense of control
Soukup et al., 2021[34]	• Videoconferencing improved collaborative decision-making • Challenge to quality decision making: technology failure and differences in communication styles • Hybrid model: supplement virtual with periodic face-to-face interaction/ more nuanced communication
Ngoi et al., 2020[35]	• Clear communication recognized to be key to minimizing uncertainty among HCPs • Rapid communication ensured quick implementation of protocols and changes • Teleconferencing was utilized for interprofessional meetings and HCPs education
Ueda et al., 2020[36]	• Necessary to centralize information, to consolidate and communicate the work • Framework for interprofessional collaboration toward a shared goal • Rapidly expanded telemedicine efforts through expedited physician credentialing, training, and modification based on changing regulations • Enabling work-from-home by prioritizing information technology resources • Virtual meetings are essential for clear and consistent messaging
Jazieh et al., 2020[38]	• Timely virtual access between staff and organization administration and leaders needed/ facilitate exchange of information and concerns • Organizations need to invest in appropriate infrastructure (i.e., adequate hardware and internet bandwidth)

	- Training needed on optimal use of telehealth, and how to effectively communicate on a virtual platform - Strong communication between HCPs critical to ensure well-coordinated work - Challenges of virtual technology need to be addressed
Reynolds et al., 2020[40]	- Transition to virtual had a big impact on cancer team - Quick adaption to ever-changing recommendations, communication and working conditions - Importance to ascertain the needs of each HCP - Training HCPs and planning for additional staffing to meet the demand

Table 2. Team functioning synopses forming Theme 1.

Author/ year	Theme 2: Promoting team resilience
Banerjee et al., 2021[19]	- 38% of HCPs (N = 1520) reported burnout, 66% did not feel that they were performing their job effectively - Psychological resilience and work hours predicted wellbeing and burnout
Marshall et al, 2022[22]	- Lower ability of HCPs to rejuvenate and reenergize for work - Limited resources, concerns for the mental health of HCPs, need for adaptation - Resilience amid shifting workloads, workflow, and new restrictions
Tremblay et al., 2022[26]	- Mechanisms promoting team resilience, courses of action in difficult situations, mechanisms for problem resolution, realistic solutions to professional workforce and team effectiveness challenges. - The BRIOT intervention: Monitoring and preparing for situations of adversity (minimizing), coping with responses to adversity (managing) and recovering and learning from the experiences (mending)
Chenevert et al., 2022[27]	- Resilience = core component of effective multidisciplinary team functioning - Integrative organizational model of resilience - Recommended interventions to increase individual and team resilience
Besson et al., 2020[30]	- Promoting resilience and acceptance of change - Support HCPs to foster growth from trauma and/or stressful circumstances - Staff striving to remain unified and connected

	• Educational and social support focusing on the long-term morale of teams • Strategies to maintain resilience: Weekly educational newsletter with mindfulness and resilience section, a quiz and reflection sections • Team cohesion as a positive effect of implemented strategies
Farah et al., 2021[31]	• Canadian health care system contributions to resilience regarding future threats • Strength-related concepts as springboard to building resilience • Recommendations: Invest in wellness programs, Chief Wellness Officers, funds allocated for support
Le Tallec et al., 2022[37]	• Constraints that hinder the smooth running of planned programs, generating stress, demotivation n and loss of meaning in the exercise of profession (ethical challenges)
Hlubocky et al., 2021[6]	• Leadership supporting resilience • Interventions to build a supportive, ethical work climate to restore resilience • Optimal evidence-based programmatic interventions

Table 3. Team functioning synopses forming Theme 2.

Author/ year	Theme 3: Encouraging selfcare and optimizing team support
Banerjee et al., 2021[19]	• Burnout significantly associated with poorer wellbeing • Wellbeing support services accessible to participants • Combination of supportive approaches (online or smartphone apps, psychological support from work, and telephone support) • Coping strategies (thinking of positives, a change in physical activity, talking to colleagues to get information and using humour or laughing)
Marshall et al, 2022[22]	• Feelings of isolation and expressions of mental difficulties and challenges • Further feelings of isolation caused by distancing from loved ones / higher anxiety • Recommendations needed for self-care activities and stress management • Self-care should be addressed during working hours (taking breaks throughout one's shift to reenergize and refocus) • HCPs should be watchful for psychological distress symptoms among coworkers • Importance of self-care to reduce personal/professional stressors • Organizations not putting the safety of the employees first/concerned about the financial aspect
Boparai et al., 2021[28]	• Work has been demanding, professionally and personally • Consideration of HCPs wellbeing must remain a focus

	• Challenge: HCPs face-to-face informal peer support opportunities, not permitted • Challenge: established self-care techniques (e.g., meeting family and friends) restricted
Anderson et al., 2020[29]	• Minimising the risk of exposure to COVID-19, for health and wellbeing of the HCPs and the continuity of clinical operations • The Compassion and Resilience Education (CARE)/peer support) • Wellbeing initiatives/mindfulness meditation videos techniques/tips on home isolation • Integration of department supported 'socially distanced' morning teas for siloed staff and virtual 'after work drinks' in an attempt to boost staff morale • Encouraging leave to continue to be taken (where possible), to ensure a mental break • Regular 'check-ins' with staff to ensure their needs are being met, they are well and safe, and any barriers to their work are being addressed
Farah et al., 2021[31]	• Support strategies (Investing in wellness programs; creating a healthy environment where workers are not overworked and can relax, meditate, or simply sit in silence; structure multi-disciplinary team for psychosocial support; allow for planned vacations even during an outbreak; implement strategies to reduce the stigma associated with mental illness; allow flexibility in work shifts; providing mental health support: invest in wellness programs, create positions such as Chief Wellness Officers responsible to create support, allocate funds to support)
Davies et al., 2020[33]	• Pandemic demands/staff vulnerable to moral injury • Staff shortages, lack of resources, can result in challenging ways of working/leading to psychological distress • Strategies (access to psychologists, strategies to cope effectively, information and practical resources, evidence-based online workshop for the prevention of post-traumatic stress disorder, collaboration with the cancer psychology service, weekly bulletin to easily access resources and helpful strategies) • Available resources monitored and revised to meet the needs of staff • Collaboration between the lead cancer nurses and the cancer psychology service to meet the needs of oncology staff
Ngoi et al., 2020[35]	• Staff morale expected to be affected by the workload of team segregation, cancellation of leave, and enforced social distancing • Strategies to boost morale (sharing of appreciation messages, provision of refreshments, as well as the setup of a group chat to share anecdotes, information, and banter)
Ueda et al., 2020[36]	• Reassignment of clinical duties to administrative roles (i.e., HCPs immunocompromised or have significant comorbidities/ increased risk with COVID-19). • Emotional and physical wellbeing of HCPs requires proactive attention • HCPs burnout is expected/ importance of self-care/ downtime for rest

Rosa et al., 2022[39]	• Anxiety, helplessness, experiences of grief and loss; conflicting emotions during the pandemic • Amplification of burnout in HCPs/ disconnection from the sense of meaning and purpose • Self-care a triggering concept • Potential power of MCP to facilitate team connectedness and meaning making • Engaging in MCP, sharing of mutual points of existential distress, fostering a connectedness between the HCPs and an opening to come together
Hlubocky et al., 2021[6]	• HCPs at risk of moral strain, in the forms of moral distress and moral injury • Strategies for institutional wellbeing programs (i.e., assessment of oncologist needs, proactive engagement of leadership and mental health in collaborative action planning, establishment of oncology wellbeing programs, execution of empirically based wellbeing interventions, needs reassessment, and modification of interventions as needs change). • Organizational resource investment in addressing COVID-19–related stressors/empowering HCPs in long-term coping • Promote and Support wellbeing and professional fulfillment at the organizational and individual level

Table 4. Team functioning synopses forming Theme 3.

Theme 1. Swiftly adopting virtual technology for communication and interprofessional collaboration.

Cancer care team functioning underwent several transformations as the COVID-19 pandemic unfolded. Rapidly shifting to virtual communication and recommitting to interprofessional collaboration were evident in 13 of the publications reviewed (Table 2).

The integration of virtual technology in cancer teams' functioning showcased numerous advantages. Turner et al. (2022) [21] acknowledged the effectiveness of virtual technology in bringing together HCPs to coordinate care and collaborate with colleagues from within and outside institutions. Similarly, Standiford (2020) [24] emphasized the importance of high-quality virtual communication and reported that virtual technology made it possible for HCPs to collaborate with colleagues with whom they did not usually interact. Anderson et al. (2020) [29]

and Soukup et al. (2021) [34] reported that switching to virtual team meetings was instrumental in improving collaborative decision-making and minimizing the impact of siloed team members on overall team performance [29,34]. Paterson et al. [25] acknowledged virtual meetings as a pragmatic and timely approach to facilitate interprofessional communication and collaboration. Ueda et al. (2020) emphasized that the rapid implementation of virtual technology during the pandemic served to maintain interprofessional collaboration, shared goals, and clear and consistent communication among HCPs.

Farah et al. (2021) [31] reported that pre-pandemic attempts to implement virtual technology were challenging. However, during the pandemic, the urgent need for alternate methods of communication quickly became evident. Tumor boards and virtual rounds, for instance, were much easier to attend [31]. Similarly, Shah et al. (2020) [32] also reported that weekly virtual staff meetings were successful in enhancing team cohesion while providing HCPs with a sense of control amid ongoing challenges.

Despite the benefits of implementing virtual technology, there were considerable challenges. Mohamedbhai et al. (2021) [20] and Boparai et al. (2021) [28] pointed out drawbacks such as HCPs' struggles to adapt to various communication modalities, deteriorated communication quality, training hurdles, and reduced interprofessional engagement. Turner et al. (2022) [21] stressed the necessity for more resources to ensure virtual meetings' quality. Moreover, Perlmutter et al. (2022) [23] highlighted the limitations of virtual meetings, particularly concerning networking with colleagues. They advocated for a hybrid model combining in-person and virtual means. Farah et al. (2020) [32] added that virtual technology can create additional clerical burden because of the lack of formalized protocols to follow. Likewise, Paterson et al.

(2020) [25], Anderson et al. (2020) [29], Shah et al. (2020) [32], Soukup et al. (2021) [34], Ueda et al. (2020) [36], Jazieh et al. (2020) [38], and Reynolds et al. (2020) [40] emphasized addressing virtual technical failures and communication differences, funding IT infrastructure, and providing training for HCPs to optimize the effective utilization of virtual tools.

Theme 2. Promoting team resilience.

Promoting cancer teams' resilience to adjust to changes, overcome obstacles, and bounce back from setbacks remained central in our review, with seven publications underscoring its importance (Table 3). Banerjee et al. (2021) [19], for instance, revealed that psychological resilience and changes in working hours during the pandemic significantly predicted HCPs' wellbeing, burnout, and job performance. In addition, 38% of HCPs (N = 1520) reported feeling burnout, and 66% were not performing their jobs effectively [19]. Le Tallec et al. (2022) [37] reported that pandemic-related constraints hindered the smooth running of oncology radiation therapists' work, generating stress, demotivation, and loss of meaning. Similarly, Marshall et al. (2022) [22] revealed that pandemic challenges affected HCPs' work performance and their ability to reenergize for work. Marshall et al. (2022) [22] underscored the need for HCPs' adaptation and resilience amid significant shifts in workloads and workflows [22]. Besson et al. (2020) [30] stated that pandemics may provide an opportunity to promote team resilience if HCPs are well supported. For instance, with enough supportive resources, HCPs can grow from the experienced trauma and difficult situations [30].

Besson et al. (2020) [30] and Marshall et al. (2022) [22] reported that HCPs showed resilience during the pandemic, were committed to work, strived to remain unified, and did their best to cope with occupational challenges [22,30]. Besson et al. (2020) [30] added that initiatives implemented to maintain team resilience during the pandemic (e.g., weekly educational newsletters, mindfulness and resilience resources, and quizzes) enhanced team cohesion [30]. Farah et al. (2022) [31] explored strategies to build and enhance team resilience and prepare for future threats. They proposed investing in enhanced training of HCPs, hiring a robust supply of staff, enhancing virtual technologies to prevent future interruptions, and addressing burnout through tailored wellness programs and work–life balance strategies [31].

Our review also identified two study protocols on promising interventions to build and sustain team resilience in cancer settings. The first, by Tremblay et al. (2022) [26], aimed to identify contextual factors promoting cancer teams' resilience and strategies to manage challenges post-COVID-19. The proposed intervention includes three main components aiming to monitor and prepare teams for adversity, managing their responses to challenging situations, and learning from these experiences and recovering [26]. The second protocol, developed by Chenevert et al. (2022) [27], aimed to evaluate a participatory approach that fosters team resilience, optimizes team effectiveness, and identifies critical factors linked to better organizational outcomes among cancer care teams [27].

Theme 3. Encouraging self-care and optimizing team support.

During COVID-19, cancer teams faced significant stressors impacting their wellbeing and job performance. HCPs' self-care and support for team members were critical, as outlined by ten publications (Table 4).

Marshall et al. (2022) [22] reported that pandemic challenges significantly impacted HCPs' wellbeing, causing higher anxiety and feelings of isolation. Banerjee et al. (2022) [28] linked HCPs' wellbeing to their job performance and stressed the significance of supporting them to maintain high-quality cancer care. Similarly, Anderson et al. (2020) [29] highlighted the importance of supporting HCPs' safety and wellbeing to ensure the continuity of clinical operations [22]. Davies et al. (2020) [33] reported that staff shortages and lack of resources challenge teamwork and lead to higher risk of distress among HCPs. Boparai et al. [28] revealed that pandemic-related work disruptions placed significant personal and professional demands on HCPs. Moreover, they were not able to seek informal support or engage in traditional self-care activities (such as meeting their family and friends) due to public health restrictions. In response to these challenges, Hlubocky et al. (2021) [6] underscored the responsibility of cancer organizations to support their team members. They highlighted how allocating organizational resources to tackle COVID-19-related stressors empowers HCPs for better long-term coping [6]. Hlubocky et al. (2021) [6] suggested several supportive initiatives such as ongoing needs assessment, peer or grief support groups, wellbeing support groups, mental health hotlines, and timely access to mental health specialists. Davies et al. (2020) [33] and Ngoi et al. (2020) [35] suggested boosting HCPs' morale by establishing wellbeing hubs, mindfulness meditation videos, and weekly newsletters of available supportive resources [25,33,35].

Rosa et al. (2022) [39] argued that evidence-based interventions such as meaning-centered psychotherapy (MCP) can be adapted to promote HCPs' wellbeing and address pandemic-related distress. MCP can facilitate team connectedness through HCPs' openness and shared experiences [39]. Farah et al. (2021) [31] suggested several interventions for team support (e.g., wellness programs, vacations during outbreaks, reducing the stigma associated with mental health, etc.) and the creation of a chief wellness officer position to oversee supportive strategies and allocate funds [31]. Marshall et al. (2022) [22] emphasized how organizations may tend to prioritize financial aspects of the pandemic over staff safety and wellbeing. Self-care activities are therefore essential to reduce personal and professional stressors [22]. Marshall et al. added that HCPs should be watchful for the symptoms of distress among colleagues and prioritize self-care by taking breaks to reenergize and refocus [22].

Discussion

To the best of our knowledge, this narrative review is the first to provide a summary of the current literature on cancer care teams' functioning during the COVID-19 pandemic. The publications' findings converged toward three main themes, related to (1) swiftly adopting virtual technology for communication and interprofessional collaboration, (2) promoting team resilience, and (3) encouraging self-care and optimizing team support.

For more than two decades, a growing body of evidence has demonstrated that the care provided through interprofessional collaboration—defined as "active and ongoing partnership between professionals from diverse backgrounds working together to provide services for the benefit of healthcare users"—results in better patient outcomes [42,43,44,45]. During the COVID-19 pandemic, the complexity of sustaining in-person interprofessional collaboration fast-tracked the implementation of innovative virtual communication tools [46]. Our review revealed that virtual technology facilitated a resurgence of interprofessional collaborations among HCPs, granting them the opportunity also to engage with colleagues with whom they typically would not interact, whether within or outside their institution. Virtual team meetings have now become an integral part of cancer care, significantly changing the ways teams function and HCPs interact with one another. Virtual team communication is also documented in the broader healthcare literature. Marlow et al. (2017) [47] argued that virtual communication offers a chance for team members to learn how to use different team processes, such as coordination, to include others' ideas and boost overall team performance [47]. They also highlighted the significant link between team performance and the timeliness and quality of virtual communication—both crucial factors during pandemics, as seen in the works of Standiford (2020) and Paterson et al. (2020) [24,25,47].

Our observations herein reveal that strong IT infrastructures and effective meeting coordination are two key strategies to enhance cancer teams' quality of virtual meetings. This aligns with the findings of Rajasekaran et al. (2021) [48], who compared virtual meetings during the pandemic to in-person interactions. They found that, with a robust infrastructure, virtual team meetings facilitated interprofessional collaboration, both within and outside the same institution [48]. Paul et al. (2016) [49] also indicated that effective coordination of virtual teams can create positive feedback loops with trust and cohesion, improving overall team performance.

This narrative review's findings also indicate that further training of HCPs regarding virtual technology is needed. Particularly in the context of busy cancer care settings, the IT learning curve might be perceived as overwhelming. Being IT proficient can contribute to more effective management of work demands, as this is becoming an inherent component of healthcare practices in most settings [50]. As seen in our review, the integration of new training programs within HCPs' curricula can help address gaps in virtual proficiencies. Kanavos et al. (2022) [51]

highlighted the challenge of potential reluctance among HCPs to learn and adopt IT tools, due to a resistant mindset. Offering incentives could effectively address these issues [51].

In addition, this narrative review's findings underscore the importance of promoting team resilience during a pandemic. Resilience, defined as "the capacity to withstand and overcome stressors that can endanger team cohesiveness and performance", can manifest at the individual, team, and organizational levels [52,53,54]. In the context of pandemics, cancer teams need to respond collectively and adjust to work challenges in unity. Understanding the factors that underlie effective collective responses to adversity can help reveal key elements for sustained team functioning during pandemics [54]. Existing evidence, for instance, links team resilience to self-care and team support [55]. This corresponds closely to our third theme, emphasizing the importance of self-care and team support during the pandemic. Indeed, interventions to support HCPs are therefore critical to optimize team functioning when cancer teams face disruptions in routine work and higher rates of burnout [56,57,58]. Creating a supportive work environment, where team members can openly express challenges and access support, fosters team resilience [30,31,59].A survey conducted at the onset of the pandemic and three months later indicated a significant increase in the percentages of HCPs reporting distress and burnout at 3 months [19]. These findings suggest that although HCPs may be adapting effectively to change, they continue to be at increasing risk for distress [56]. Long-term supportive strategies are therefore crucial so that HCPs cope more effectively as the pandemic evolves.

Supportive strategies summarized in this review focus primarily on HCPs, with no mention of auxiliary staff. Gasper et al.(2020) posited that such strategies should be inclusive of all cancer care team members, clinical and non-clinical (e.g., clerical and volunteers) alike [60]. As such, preparing healthcare systems to meet pandemic-related demands means addressing the entire team's needs. However, there is a lack of evidence on the experiences of all team members [60]. According to Hlubocky (2022) [61], burnout tends to be contagious within teams [61]. When one team member experiences occupational stress, significant demands are placed on others, who, in turn, are at greater risk of developing burnout in the future [61]. Consequently, we must promptly identify and implement supportive strategies for all involved.

This review also points to gaps in our understanding of the cognitive processes affecting team functioning amid pandemics. Team members, however, have the capacity to construct mental models pertaining to their work and cultivate a collective comprehension of operational processes [14]. This is both significant and complex. Exploring team members' mental models of team functioning can add to our shared understanding of what constitutes optimal team performance. Consequently, this can lead to the co-creation of targeted interventions and the fostering of environments that are conducive to team performance.

Despite meaningful contributions of this review, findings should be interpreted with some caution, considering the heterogeneity of publications and the sole focus on cancer care teams. The exclusion of publications addressing specific units (e.g., emergency, COVID-19 units) may have narrowed our understanding of team functioning during the pandemic. In addition, the paucity of robust studies on the topic means that we do not have much evidence on significant predictors of team functioning (positive and negative) during a public health crisis. Last, whereas our search ended in October 2022, COVID-19 continued to evolve, with relevant data still being published.

Conclusion

This narrative review provides a comprehensive account of the literature on key elements of cancer teams' functioning during the COVID-19 pandemic including virtual collaboration and communication, team resilience, self-care, and team support. More research is needed to document the perspectives of broader-based team members (such as patients and lay carers). The findings summarized herein can serve to inform priority domains during a pandemic so that timely strategies can be co-created among all team members involved.

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Transitioning to Chapter 2

The main goal of the narrative review (manuscript #1) was to situate my work within the current literature pertaining to cancer team functioning during health crises.

Through an in-depth literature review, we identified key features of cancer team functioning during the pandemic including (1) swiftly adopting virtual technology for communication and interprofessional collaboration, (2) promoting team resilience, and (3) encouraging self-care and optimizing team support.

The review revealed a paucity of original studies (i.e., quantitative, and qualitative) exploring key indicators of team functioning during a pandemic, a lack of evidence-based guidelines to inform optimal team functioning processes, and a restricted inclusion of stakeholders (i.e., mostly healthcare professionals) with little attention to other team members such as patient representatives and informal carers.

In the next Chapter, manuscript #2 addresses some of these shortcomings by measuring the perceptions of HCPs, patients, informal carers, and volunteers of team functioning through two main indicators: Team Effectiveness, TE, and Team Relational Coordination, TRC. We measure TE/TRC during COVID-19 (2021-2022) and while transitioning out of the pandemic (2023). We also document the associations between patient perceptions of TE and TRC and their care experiences.

Chapter 2: Cancer team functioning over the covid-19 pandemic (manuscript #2)

Title: Measuring team functioning during the COVID-19 pandemic: perspectives of cancer care team members

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Abstract

Background: In a public health crisis such as COVID-19, cancer teams face significant challenges including acute work disruptions, rapid shifts in clinical practice, and burnout. Within this context, it is crucial to explore team functioning from the perspectives of multiple stakeholders who have been affected by the COVID-19 pandemic. Objectives. This quantitative pilot study aimed to 1) measure perceptions of multi-stakeholders on key indicators of team functioning (Team Effectiveness, TE, and Team Relational Coordination, TRC) during COVID-19 and its transition, and 2) document whether patient perceptions of TE/TRC are significantly associated with their cancer care experiences. Methods. A descriptive design with repeated measures was used. Through convenience sampling, participants were recruited from two outpatient cancer clinics at a large university-affiliated hospital, in Montréal, Qc, Canada. Sixty-six participants (ie, 13 healthcare professionals, 40 patients, 6 informal caregivers, and 7 volunteers) completed e-measures at T1 (years 2021-2022) and $n = 44$ at T2 (year 2023). Results. At T1, participants reported high perceptions of Team Effectiveness (scale 1 to 6) $M = 4.47$; $SD = 0.71$ ($Mdn = 4.54$; IQR: 4.06-5) and Relational Coordination (scale 1 to 5) $M = 3.77$; $SD = 0.77$ ($Mdn = 3.81$; IQR: 3.12-4.38). There were no significant differences in perceptions of team functioning indicators across the four groups. At T2, no significant changes in TE/TRC perceptions were found. At both time points, patient perceptions of TE/TRC were significantly correlated with positive cancer care experiences (Spearman rank correlation rs ranging from 0.69 and 0.83; $p < 0.01$). Conclusions. To our knowledge, this is the first study documenting perceptions of cancer team functioning during the pandemic and its transition as reported by multi-stakeholders. Significant relationships between patient perceptions of TE/TRC and their cancer care experiences underscore the importance of including patients’ views in team functioning processes. Future work should rely on larger sample sizes to further explore key elements of optimal team functioning during a health crisis.

Keywords: Team functioning, team effectiveness, team relational coordination, cancer care, patient satisfaction, patient experiences, COVID-19, pandemic, health crisis.

Introduction

In the ever-evolving healthcare landscape, the provision of high-quality care hinges on the collaborative efforts of multidisciplinary members who work as a coherent team to optimize workflow, illness management processes and outcomes.[1] With rapidly increasing cancer care demands (ie, higher caseloads, various treatment options, distinct patients' needs and workforce shortages), cancer teams often report feeling ill-equipped to meet these demands. [2] Recruiting more cancer care professionals is likely to be insufficient to address care complexities and the emphasis is now placed on documenting promising strategies to optimize team functioning. [3-9]

Team Effectiveness (TE) and Team Relational Coordination (TRC) are key concepts in documenting overall team functioning [10-12] and significant determinants of care quality, patient safety, and overall healthcare system efficiency. [13-15] Team effectiveness refers to the ability of a team to work together effectively, have clear role delineation, efficient task allocation, shared goals, and a collective commitment to clinical excellence. [12,16-18] Relational coordination emphasizes the quality of relationships and communication among team members. For instance, optimal TRC is characterized by timely, accurate, and contextual team member communication that fosters shared understanding, mutual respect, and trust. [19,20] Maintaining optimal TE and TRC in busy cancer care settings can be challenging. For instance, cancer teams include diverse members, each bringing forth different perspectives on treatment and care. Conflicting opinions, different priorities, and communication styles complicate TE and TRC-related processes and outcomes. [21-23] In addition, cancer settings often carry high cognitive and emotional demands, putting members at risk for moral distress, emotional exhaustion, and burnout. [24,25] One-third to one-half of oncologists, for instance, are expected to experience burnout at some point in their careers.[25,26] Similarly, approximately 30% of cancer care nurses report burnout.[27] These occupational effects involve declines in cognitive functions (attention and memory) leading to poorer work performance. [28-30]

The COVID-19 pandemic posed additional challenges for cancer care teams causing significant strain on cancer care delivery. [31-33] Healthcare professionals (HCPs) had to quickly change their work routines including reducing in-person consultations, initiating virtual encounters, replanning treatment, and postponing various clinical activities. [31-36] The ensuing weight of these decisions often created distress including internal ethical dilemmas affecting teams' overall functioning. [32,37-39] In parallel, personal stressors caused by the pandemic restrictions, economic instability, and fear of bringing COVID-19 home added to teams' occupational burden. [40] HCPs reported burnout, fear, anxiety, depression, anger, and irritability with little supportive resources. [39-41] As such, these combined stressors significantly reduce work-related capacities including a decrease in team members' performance, deterioration in communication and teamwork and limited collaborative decision-making. [32,41-46]

The pandemic also disrupted patients' cancer care experiences. Individuals with cancer reported feeling isolated, having no or poor communication with their treating team, and limited involvement in clinical decisions. [47-53] Patients in treatment, reported significantly lower satisfaction with virtual care compared to those seen in person. [54] Engagement of cancer teams in care did not often match patients' needs. [47] Informal caregivers and volunteers also felt distant from the team, helpless, and struggled to understand changes in care processes. [55,56]

A recent narrative review by Attieh & Loiselle, 2024 summarized the literature on key elements of cancer team functioning during COVID-19 and highlighted the paucity of evidence on key indicators of team functioning and the need to document the perspectives of broader-based team members including patients and informal carers.[57] Exploring multi-stakeholders' perceptions of TE and TRC in a more dynamic context, and during the pandemic is therefore vital to explore if teams are optimally responsive in these times. Given the increasing weight put on informal caregivers and volunteers to be involved in care, gathering their perspectives on team functioning is also necessary. [58-64]

Therefore, this pilot study was designed to 1) measure perceptions of multi-stakeholders on key indicators of team functioning (Team Effectiveness, TE, and Team Relational Coordination, TRC) during COVID-19 and its transition, and 2) document whether patient perceptions of TE/TRC are significantly associated with their cancer care experiences.

Materials and Methods

Study design

This is a descriptive design with repeated measures during COVID-19 (T1: years 2021-2022) and its transition (T2: year 2023).

Setting

Participants were recruited from the breast and gynecologic cancer clinics at a university-affiliated hospital in Montréal, Quebec, Canada.

Sample and eligibility criteria

The study sample included HCPs, patients, informal caregivers, and volunteers. Participants had to be 18 years or older, able to complete study requirements in French or English, and have remote device and internet access.

Eligible patients should have initiated or completed treatment within the past year from recruitment.

HCPs, informal caregivers, and volunteers had to be in their respective roles for at least 3 months.

Procedures

Following ethics approval (CIUSSS West-Central Montreal #2021-2423), the research coordinator presented the study at staff meetings (ie, tumor boards, nursing rounds, administrative). Clinic clerks were also sent e-promotional flyers to introduce the study to team members. If interested, HCPs contacted the research team by phone or email. During remote or in-person consultations, HCPs shared study details with patients and accompanying informal caregivers. A community-based volunteer organization also sent the study flyers to their service users and volunteers. Recruitment flyers were also posted in waiting rooms and clinics.

All interested participants contacted the study team by email or phone to express interest in participating. The research coordinator then contacted participants by phone to explain the study procedures and verify eligibility. If eligible and interested, participants were sent the link to the e-consent form to read and sign. After consenting to participate, they were sent a link to the T1 e-questionnaire with a unique login password. These questionnaires were distributed and completed between July 2021 and July 2022 for the pandemic-related portion of the study. The T2 e-questionnaire was sent in March and April 2023. All study documents (ie, consent, questionnaires) were collected and stored on Qualtrics-a secure electronic data capture system (https://www.qualtrics.com/research-core/).

Measures

Study measures and timelines are summarized in Table 1.

<u>Sociodemographic and general information:</u> An author-generated self-report questionnaire included background information on age, sex, gender, medical history (for patients), work history (for HCPs) and role description (for volunteers/informal caregivers).

<u>HCP Perceptions of Team Effectiveness questionnaire (HCP- PTE) [17]:</u> The 26-item HCP-TE questionnaire measures healthcare team perceptions of team effectiveness such as role clarity, trust, decision-making, communication, problem-solving, timely care, and patient/family focus. Response options range from 1 (strongly disagree) to 6 (strongly agree). Items were slightly revised by our team to be more specific to the cancer setting. Overall scale reliability Cronbach alpha is 0.91. [17]

<u>Patient/Family Team Effectiveness questionnaire (PF-PTE) [18]:</u> This scale includes 24 items assessing patient or family perceptions of how their healthcare team functions. [18] Responses range from 1 (strongly disagree) to 6 (strongly agree). Items were slightly revised by our team to be more specific to the cancer setting. Cronbach alphas range from 0.72 to 0.84. [18]

<u>Team Relational Coordination (TRC) [20]</u>: The 7-item TRC scale assesses interprofessional team functioning through communication (4 items including frequency, accuracy, timeliness, and

problem solving) and relationship (3 items including shared goals, shared knowledge, and mutual respect). [19,20] Responses are on a 5-point scale "1 = never, 2 = rarely, 3 = occasionally, 4 = often, and 5 = always". Items were slightly revised by our team to be more specific to the cancer setting and different stakeholders completing the survey. Internal consistency is high with Cronbach alphas ranging between 0.80 and 0.90. [19,20]

Patient Satisfaction with Cancer-Related Care (PSCC) [65]: The 18-item PSCC scale assesses patients' satisfaction and experiences with cancer care. Each item is rated from "1 = not satisfied" to "5 = very satisfied", with a total scale score range from 18 to 90. The PSCC has high internal consistency as indicated by Cronbach coefficient alphas ranging between 0.95 and 0.96. [65]

Table 1 Description and timelines of study measures

Measure	**Description**	**Baseline (T1) During COVID-19**	**Follow-up (T2) Transitioning out of the pandemic**
HCPs			
Socio-demographic & Work history	Series of questions developed by the research team (eg, gender, educational background, years of	X	

	professional experience in cancer care, work hours).		
Perceptions of team effectiveness	HCP Team Effectiveness questionnaire (*HCP*-PTE) [17]	X	X
Perceptions of team relational coordination	Relational Coordination questionnaire [20]	X	X
Patients			
Socio-demographic & Medical history	A series of questions developed by the research team	X	
Patient cancer care experiences	Satisfaction with Cancer-related Care (PSCC) [65]	X	X
Patients, Informal caregivers, and Volunteers			
Perceptions of team effectiveness	Patient and family Team Effectiveness questionnaire (*PF*-PTE) [18]	X	X
Perceptions of team relational coordination	Adapted version of Relational Coordination questionnaire [20]	X	X

Data analysis

The collected data were exported from Qualtrics (data collection platform) to SPSS (Statistical Package for Social Sciences), version 25 for analysis. [66] Descriptive statistics and frequencies were calculated for patients' sociodemographics, and numbers were reported for smaller size groups (i.e., HCPs, informal caregivers, and volunteers). For each participant, total scores for perceptions of TE and RC were computed by creating a new variable for each measure and calculating the mean for each questionnaire item. The same computation was done to obtain overall patient satisfaction. Next, Means/ Standard deviations (M; SD) and Medians/Interquartile Ranges (Mdn; IQR) of total scores were computed by stakeholders' group. IQR refers to the 25th and 75th percentiles.

We conducted the Shapiro-Wilk test to verify if our data are normally distributed. We conducted non-parametric tests given the small sample size and the non-normal distribution for some of our data. To determine if perceptions of TE or TRC are significantly different between the four groups, we conducted a Kruskal Wallis non-parametric test. To determine if patient perceptions of team functioning (independent variable) are associated with their cancer care experiences (dependent variable), Spearman rank correlations for non-parametric variables were calculated with $\alpha = 0.01$.[67] Related-Samples Wilcoxon Signed rank tests were computed to test potential significant differences between team functioning during COVID-19 and transitioning out of the pandemic with the $\alpha = 0.01$.

Results

Participant characteristics

The sample included 66 participants (ie, 13 HCPs (4 oncologists, 4 nurses, and 5 allied HCPs), 40 patients, 6 informal caregivers, and 7 volunteers). Mean age for each group of participants were M = 42.4; SD = 8.3 (HCPs), M = 56.2; SD = 10.4 (patients), M = 51.6; SD = 9.6 (informal caregivers), and M = 67.2; SD = 7.5 (volunteers). Eleven HCPs, 39 (97.5%) patients, 4 informal caregivers, and 7 volunteers self-identified as female. Most participants were white/Caucasian (8 HCPs, 28 patients (70%), 4 informal caregivers, and 6 volunteers). Participant sociodemographic details are reported in Table 2.

Among HCPs' participants, eight reported working full time and six had been working with the same team for more than 10 years. Sixty percent of patients (n = 24) had breast cancer, 40% (n = 14) had gynecologic cancer, 21 (52.5%) were under active treatment and 19 (47.5%) had completed treatment.

Four out of the seven informal caregivers were in that role for 2 years with duties including care management, and emotional and practical support. Six out of seven volunteers were cancer survivors and their role included greeting and guiding patients, peer/emotional support, and informing patients on available resources and programs.

Table 2. Participant sociodemographic data

	HCPs (n = 12) *	Patients (n = 40)	Caregivers (n = 6)	Volunteers (n = 7)
Age M(SD)	42.4(8.3)	56.2 (10.4)	51.6 (9.6)	67.2 (7.5)
	n	n (%)	N	n
Gender				
Male	1			
Female	11	39 (97.5%)	2	7
Non-binary		1 (2.5%)	4	

Assigned sex at birth				
Male	1		2	
Female	11	40 (100%)	4	5
No answer				2
Highest level of Education				
High school diploma		2 (5%)		
Technical/pre-		3 (7.5%)		1
university	2	18 (45%)	2	2
Undergraduate	3	1 (2.5%)	1	1
bachelor	4	12 (30%)	2	2
Professional degree	1	1 (2.5%)		
Masters degree	2		1	
Doctoral degree		3 (7.5%)		1
Post-doctoral degree				
Other				
Ethnicity				
South Asian			*2*	
White (Caucasian)	8	28 (70%)	*4*	*6*
Black		3 (7.5%)		
Chinese	1	1 (2.5%)		
Filipino		1 (2.5%)		

Latin American		2 (5%)		
Mixed ethnicity	2	3 (7.5%)		
Other	1	1 (2.5%)		*1*
Prefer not to answer		1 (2.5%)		

**One HCP did not complete socio-demographics questions*

Perceptions of team effectiveness and relational coordination

At T1, participants (N = 66) provided high perception overall ratings for Team Effectiveness M = 4.47; SD = 0.71 (Mdn = 4.54; IQR: 4.06-5) and Relational Coordination M = 3.77; SD = 0.77 (Mdn = 3.81; IQR: 3.12-4.38). Each group's perception ratings are reported in Tables 3 and 4. No significant differences in perceptions of TE/TRC were found across the 4 groups at $\alpha = 0.01$ TE [$\chi^2(3) = 8.31$, p = 0.04]; TRC [$\chi^2(3) = 3.36$, p = 0.34].

As we transitioned out of the pandemic (n = 48), no significant differences in TE/TRC perception ratings were found TE t(48) = 526, p = 0.88; TRC t(47) = 396, p = 0.11. Similarly, there were no significant differences in perceptions of TE [$\chi^2(3) = 2.84$, p = 0.42] or TRC [$\chi^2(3) = 2.68$, p = 0.44] across the 4 groups.

Table 3. Perceptions of Team Effectiveness across study groups during COVID-19 (N = 66) and while transitioning out (n = 48).

	Perceptions of Team Effectiveness					
	T1			T2		
	N	Mean (SD)	Median (IQR)	N	Mean (SD)	Median (IQR)
Overall	66	4.47 (0.71)	4.54 (4.06-5.0)	48	4.48 (0.77)	4.56 (4.10-5.03)
Patients	40	4.62 (0.79)	4.71 (4.14-5.33)	31	4.57 (0.86)	4.67 (4.17-5.17)
HCPs	13	4.39 (0.45)	4.50 (4.11-4.67)	7	4.36 (0.65)	4.46 (3.81-4.73)
Volunteers	7	4.11 (0.43)	4.17 (3.92-4.46)	5	4.35 (0.25)	4.42 (4.08-4.58)
Caregivers	6	4.10 (0.64)	4.46 (3.51-4.51)	5	4.22 (0.67)	4.33 (3.64-4.73)

Table 4. Perceptions of Team Relational Coordination across study groups during COVID-19 (N = 66) and while transitioning out (n = 48).

	Perceptions of Team Relational Coordination					
	T1			T2		
	N	Mean (SD)	Median (IQR)	N	Mean (SD)	Median (IQR)
Overall	66	3.77 (0.77)	3.81 (3.12-4.38)	48	3.68 (0.75)	3.81 (3.17-4.21)
Patients	40	3.77 (0.90)	4.00 (3.05-4.48)	31	3.65 (0.83)	3.53(3.09—4.38)
HCPs	13	4.00 (0.39)	4.00 (3.69-4.38)	7	3.90 (0.28)	3.90(3.76-4.05)
Volunteers	7	3.63 (0.61)	3.71 (2.94-4.00)	5	4.09 (0.24)	4.00(3.88-4.36)
Caregivers	6	3.39 (0.46)	3.19 (3.03-3.88)	5	3.17 (0.78)	3.52(2.38-3.78)

Patient experience with cancer care

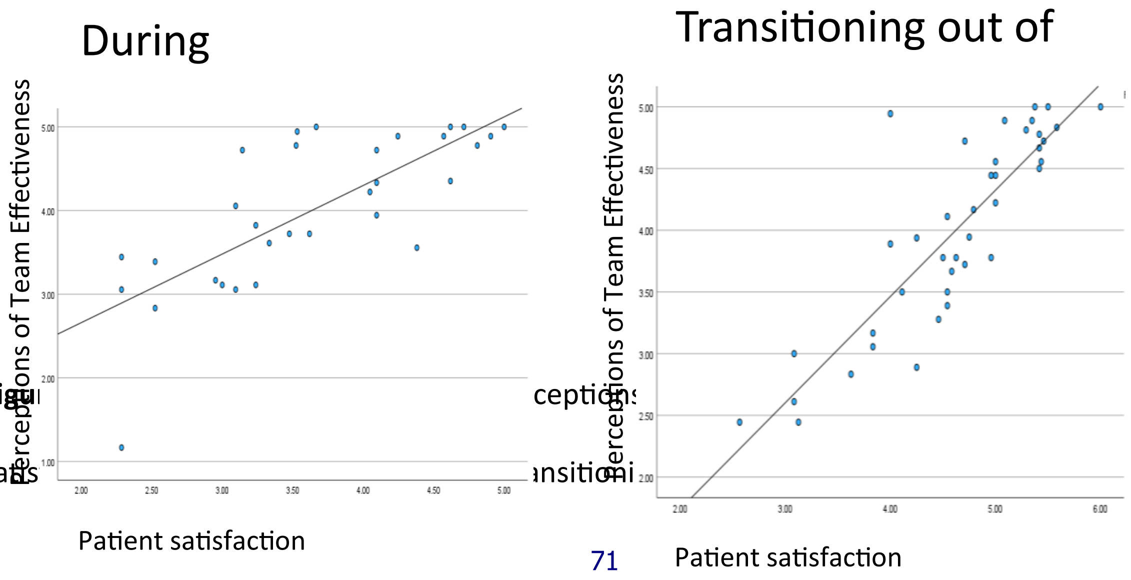
Patients reported high satisfaction scores at T1, M = 71.58; SD = 14.28 (Mdn = 72.5; IQR: 60.5-85) (Scale range between 18 and 90), and M = 71.43; SD = 16.72 (Mdn = 72; IQR: 58-87.5) at T2. There was no significant difference in satisfaction between both timelines t(30) = 230, p = 0.54.

Association between patient perceptions of team functioning and their cancer care experience

Patients’ perceptions of TE and TRC were found to be significantly correlated with their cancer care experiences at T1 and T2. Figures 1 and 2 show the scatterplots of the correlations for both timelines. During COVID-19, a strong positive correlation was found between patients’ perceptions of TE and their cancer care experiences, $r_s = 0.83$; $p < 0.01$. In addition, a moderate positive correlation was noted between patient TRC perceptions, and their cancer care experiences $r_s = 0.69$; $p < 0.01$.

At T2, the correlation with perceptions of TE was maintained, $r_s = 0.78$; $p < 0.01$, and a stronger correlation was found with TRC perceptions $r_s = 0.79$; $p < 0.01$.

Figure 1. Correlations between patient perceptions of Team Effectiveness and satisfaction with cancer care during and transitioning out of the pandemic.



Figu ceptions

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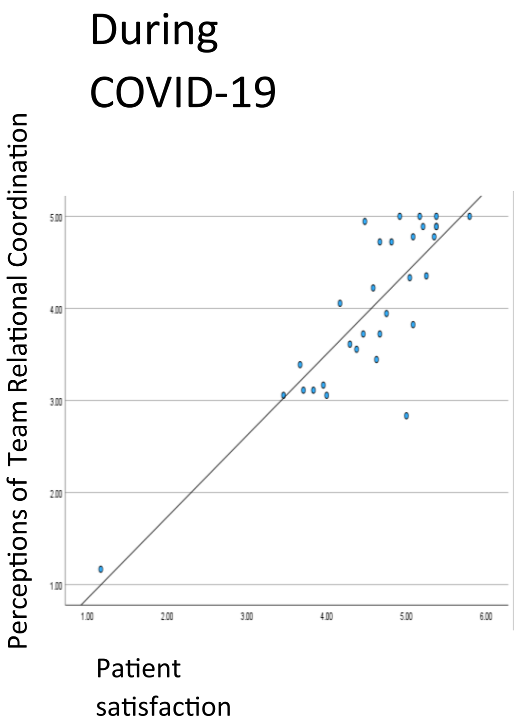
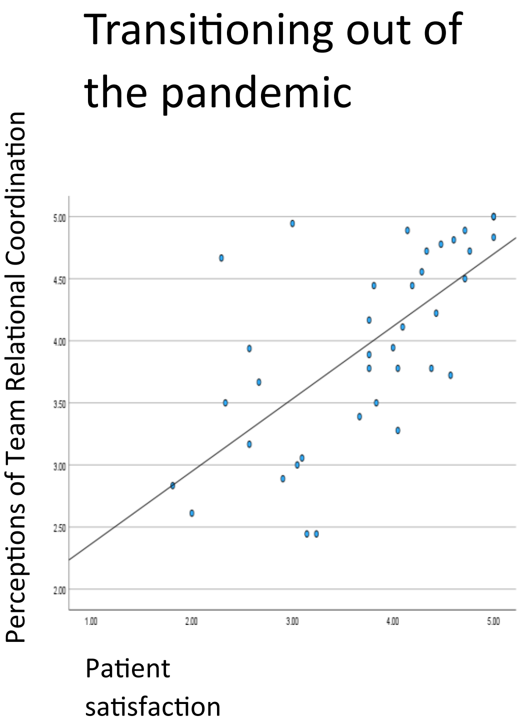

During COVID-19


Transitioning out of the pandemic

Discussion

In this pilot study on cancer team functioning, participants reported high perceptions of TE and TRC with no significant change between time points or across the four groups. Despite disruptions amidst the pandemic, high perceptions of team functioning might be explained by the rapid adoption of virtual technologies for communication and consultations that made it easier for cancer teams to maintain effective collaboration and care coordination as well as patient contact. [46,57,68,69] In Anjara et al., 2021, participants reported greater collaboration more bottom-up decision-making, and enhanced interdisciplinary teamworking, supporting the good operation and functioning of the team.[70] Similarly, Stayt et al., 2022, reported that HCPs were striving to work to the best of their abilities despite the work-related challenges during the pandemic. [71]

High perceptions of TE and TRC reported by patients and informal caregivers might also be explained by the trust they felt toward their HCP team during COVID-19. In a qualitative study by Chia et al., 2021, patients and caregivers reported trusting their team and expressed high confidence in the competence of HCPs in managing cancer care. [72] Patients and informal caregivers also described their interactions with the care team as positive despite the challenges of maintaining connections and the prominent healthcare silos during the pandemic. [73-76]

This pilot study results also indicate that patients were satisfied with the cancer care provided during and transitioning out of the pandemic. Patient perceptions of TE and TRC were significantly and positively correlated with their care experiences. Similar to our findings, two other studies reported high levels of patient satisfaction with the overall care and services provided during the pandemic. [77,78] Literature also documents that interprofessional collaboration is associated with higher patient satisfaction. For instance, a team that collaborates effectively connects different specialized care tasks and works together to make joint clinical decisions centered on patient needs and preferences. [79] In a study by Tremblay et al., 2017, patients reported higher positive perceptions of patient-HCPs communication and person-centered care, in teams characterized by high interdisciplinary teamwork intensity, compared to lower teamwork intensity. [80] Similarly, Zajac et al, 2021, found that high-quality teamwork is significantly associated with increased patient satisfaction. [81]

To our knowledge, this is the first study documenting perceptions of cancer team functioning during the pandemic and its transition as reported by multi-stakeholders including patients, informal caregivers, and volunteers. Whereas study results are promising, some limitations are acknowledged. Given the fact that it is a pilot study, the small sample size limits our ability to reach definitive conclusions. In addition, despite our ongoing efforts, recruitment was challenged by the restrictions to approach participants in person, resulting in smaller samples than anticipated. If we had a larger sample, we would have conducted multiple regression allowing us to control for potential confounding variables. Another study limitation includes the lack of baseline measures pre-pandemic. For instance, we chose both cancer teams given their clear treatment trajectories and the well-documented biopsychosocial needs of patients, and we cannot be certain if they were high or low functioning. It would have also been informative to have a baseline measurement for team resilience. [82] If teams were found to be initially high functioning and resilient, this could have contributed to the stability during and transitioning out of the pandemic. [83] Moreover, the study measures completion was spread over a year (from July 2021 to July 2022) for the pandemic-related portion of the study. This period coincides with the end of the third COVID-19 wave in Quebec and the beginning of the seventh wave. Perceptions might have differed during other times/waves, such as the onset of the pandemic. Last, TE and TRC were considered two distinct concepts of team functioning. Future studies with a larger sample are recommended to explore whether TE and TRC independently or jointly contribute to team functioning.

Conclusions

During the pandemic and its recovery period, cancer care teams including HCPs, patients, informal caregivers, and volunteers, had to adjust and readjust to changes in in-person, virtual, and hybrid care environments. In this study, we documented multi-stakeholders' perceptions of cancer care team functioning. Perceptions of TE, TRC, and patient care experiences were found to be rated high and relatively unchanged during and transitioning out of the pandemic. A future qualitative exploration of key themes related to team functioning and the inclusion of additional factors such as team resilience would complement this work and add crucial insights into the overall cancer team optimal functioning.

Ethics Approval and Consent to Participate

This study was conducted following the Declaration of Helsinki and approved by the ethics committee CIUSSS West-Central Montreal (#2021-2423), written informed e-consent was obtained from all participants.

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Transitioning to Chapter 3

The narrative review in manuscript #1 revealed a paucity of original studies (i.e., quantitative, and qualitative) exploring team functioning during a pandemic and a restricted inclusion of stakeholders (i.e., mostly health care professionals) with little attention to other team members such as patient representatives and informal carers. These shortcomings were addressed partially through a quantitative methodology and broad recruitment as reported in manuscript #2. More specifically, I measured team functioning longitudinally in terms of team effectiveness and relational coordination during and transitioning out of COVID-19. I also examined if perceptions differed within and across the four groups (i.e., HCPs, patients, informal caregivers, and volunteers) and explored potential associations between patient perceptions and their experience with cancer care teams. Findings revealed compelling evidence that perceptions of team effectiveness, relational coordination, and patient experiences' ratings remained high during COVID-19 and its transitional phase with no significant differences across groups. Given the recruitment challenges and the pilot nature of this study, the small sample size limits our ability to reach definitive conclusions.

Our findings confirmed a significant strong positive correlation between patient perceptions of team functioning and their cancer care experiences underscoring the importance of including patients' views in team functioning processes.

Complementing the quantitative findings, we proceeded with a qualitative approach that served to add a deeper understanding of multi-stakeholders' perceptions of optimal team functioning to identify potential differences in perceptions that would have been missed by solely relying on quantitative data. Results from an additional question not reported in

Manuscript #2 stressed the importance of qualitative exploration of different perceptions. For instance, when asked to rate the following statement "The cancer care team considers me as an inherent member/partner of the team", half of the patients, informal caregivers, and volunteers (i.e., n = 25), strongly disagreed, disagreed or remained neutral. (Table 1) Moreover, they reported feeling that they were not being considered as team members.

	Strongly disagree	*Disagree*	*Neutral*	*Agree*	*Strongly agree*
Patients (n = 40)	3 (7.5%)	4 (10%)	13 (32.5%)	11 (27.5%)	9 (22.5%)
Caregivers (n = 6)	1 (16.7%)		2 (33.3%)	3 (50%)	
Volunteers (n = 5)	1 (20%)	1 (20%)		3 (60%)	
Total (n = 51)	**5 (9.8%)**	**5 (9.8%)**	**15 (29.5%)**	17 (33.3%)	9 (17.6%)

Table 1: Levels of agreement/disagreements of patients, informal caregivers, and volunteers on being considered members of the team.

The literature documents that teams sharing individual perceptions of team processes are more likely to develop mutual understandings of how to sustain or enhance team performance. This shared understanding is referred to as a “shared mental model”. In the next manuscript (#3) titled “Using fuzzy cognitive mapping to explore stakeholders’ mental models of cancer team functioning during COVID-19 and beyond”, distinct mental model maps for each stakeholder group were created and combined to recreate a shared mental model. Within this shared model, the strongest attributes influencing optimal team functioning were identified.

Chapter 3: A shared mental model for optimal cancer team functioning (manuscript #3)

Title: Using fuzzy cognitive mapping to explore stakeholders' mental models of cancer team functioning during COVID-19 and beyond

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Abstract

Background: Shared mental models relate positively to team processes and performance. Cancer teams face significant challenges in maintaining a shared mental model for optimal functioning, particularly amid pandemics. Objective: This work aimed to identify stakeholders' perceptions of factors contributing to or hindering optimal cancer team functioning during COVID-19 and beyond. Methods: Using Fuzzy Cognitive mapping, 13 participants in breast and gynecologic cancer clinics (i.e., 5 healthcare professionals, 3 patients, 2 informal caregivers, and 3 volunteers) created distinct maps delineating contributors and barriers to optimal team functioning. Results: The combined maps revealed a shared mental model comprising five pivotal categories with the highest cumulative influence on optimal functioning: effective communication, improved care experiences, the philosophy of care, support for psychosocial needs and clarity of team members' roles. Informal caregivers and volunteers reported that optimizing their roles and offering training and support have the highest influence. Conclusion: Collaborating around the most influential categories could be a promising means to develop strategic team priorities and co-design interventions to optimize cancer team functioning.

Keywords: Cancer team, optimal functioning, fuzzy cognitive mapping, mental models, COVID-19 pandemic.

Introduction

Team cognition is identified as a central construct to understanding cancer care team functioning. [1-3] Team cognition refers to "how the knowledge related to team functioning is mentally organized, executed, and shared within the team". [4] Research to date shows that team cognition is positively correlated with job performance. [5] Team members who share their views on what constitute optimal team functioning are more likely to build a shared understanding of what is needed and how to proceed to increase performance. [4] This shared understanding is referred to as shared mental models, [6] which allow team members to understand care processes similarly, develop mutual expectations about each others roles and share causal interpretations of team dysfunctions. [5] Cancer care teams face three main challenges in their process of developing shared mental models. First, each care action along the cancer continuum has a unique purpose and requires specialized knowledge. [7,8] As such, cancer care teams often involve multiple specialists from various disciplines (e.g., nurses, oncologists, psychologists, social workers, occupational therapists, nutritionists, etc.) with distinct professional roles and care perspectives. [7,8] Second, cancer team membership evolves over time. [8] When new members join a team, they often have limited knowledge of patients, the care required and how the team functions. Similarly, gaps in handoff information occur when members leave the team. Conflicted perspectives, priorities, and the tendency to work in silos disrupt overall team performance. [3] Third, work-related stressors can also threaten the team's shared mental model. [9] In busy oncology settings, the work is cognitively and emotionally demanding putting members at high risk for burnout. [10-13] Burnout is often associated with declines in team cognition including executive functions, attention, and memory, [9] potentially affecting performance outcomes of an already strained workforce. [14,15]

Having a shared mental model and maintaining alignment on team functioning processes became more challenging during COVID-19. [16-22] Internal ethical dilemmas and changes in teams' practices disrupted team functioning and cancer care delivery. [23,24] Team members developed personal and work-related stressors including burnout, fear, anxiety, depression, anger, and irritability. [25,26] If not mitigated efficiently, these stressors are known to severely disrupt work-related capacities. [16,23,27]

Developing a shared mental model for cancer teams starts by exploring team members perceptions on factors affecting team functioning. [3,16] Comparing and contrasting individuals' perceptions while including caregivers and volunteers, add richness to our understanding of optimal team functioning. [15,28-35] As part of a larger study, the work herein addresses the following research question: "What are the factors contributing to or hindering optimal cancer team functioning as perceived by various stakeholders?" We aimed to identify similarities and differences in perceptions between team members from breast and gynecologic cancer clinics, patients, informal caregivers, and volunteers. We used Fuzzy cognitive mapping (FCM)-a technique that combines fuzzy logic and cognitive mapping to model causal interactions between different concepts. [36] FCM is increasingly utilized in healthcare research and commonly applied as a group decision support tool to better understand the complexity of factors contributing to specific outcomes. [37] Using FCM is helpful to depict diverse perceptions on factors influencing a particular team issue, emphasize areas of consensus or discrepancy between different members and to build a team shared mental model. [37]

New contribution

To our knowledge, this is the first study to document multi stakeholders' perceptions on factors contributing to cancer care team functioning during a pandemic and beyond. The use of a flexible yet robust technique helped to portray and compare different mental models. Combining different perspectives into one shared mental model represents a step forward in understanding the complex dynamics of factors linked to team functioning and could be a promising means to co-develop strategic priorities aiming to enhance cancer care team functioning and team readiness for future pandemics.

Methods

Fuzzy Cognitive Mapping technique

Fuzzy cognitive mapping is a technique representing the causal reasoning of different groups in the form of concept maps. [36] Fuzzy cognitive maps are composed of concepts (nodes) with perceived impacts on a particular health issue and among themselves. The concepts are linked with arrows (edges) indicating perceived causal connections. Participants weight each arrow to indicate its perceived strength, usually in a scale of five for the strongest influence and values closer to zero for the weaker ones. Weights have positive signs to indicate that, as one concept increases, its outcome also increases. A negative sign indicates that the increment of a concept results in a reduction of its outcome. The weights reflect the viewpoints and beliefs of those creating the map rather than a predictive statistical model. [38]

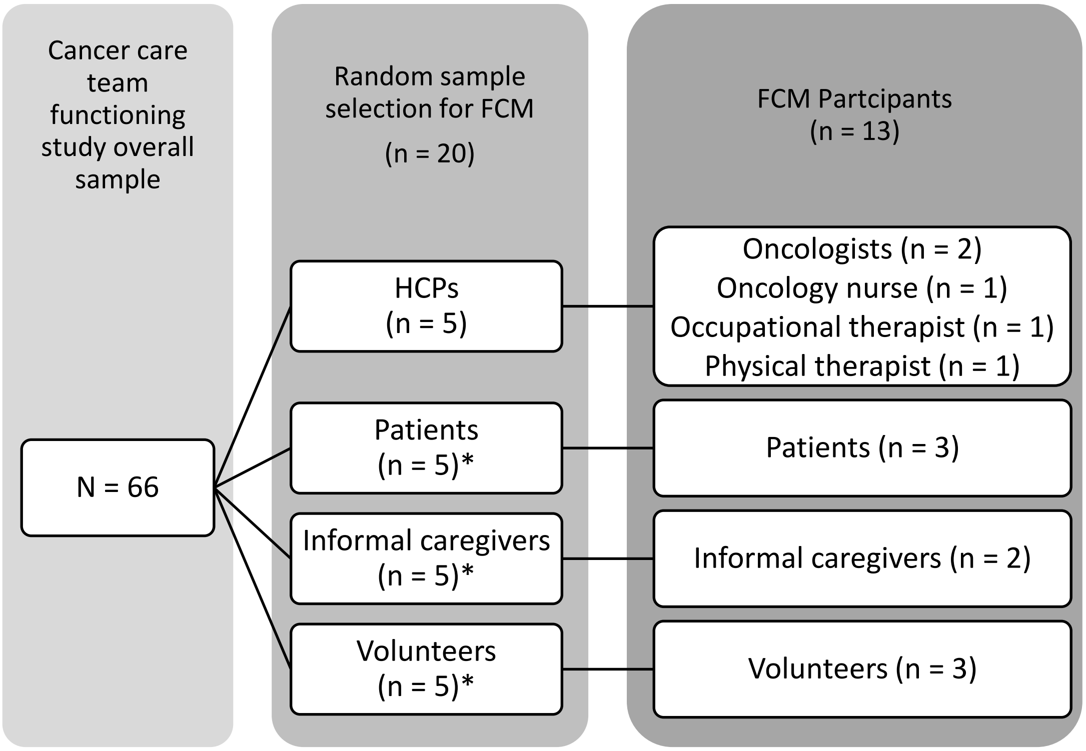
Sample

Participants included HCPs, patients, informal caregivers, and volunteers. To participate, individuals had to be 18 years or older, able to actively engage in mapping sessions and have access to a remote device and internet connection.

Patients had breast or gynecologic cancer diagnosis (any stage). HCPs, informal caregivers, and volunteers were in their respective roles for at least 3 months.

A sample of 20 participants (i.e., five participants from each group) were randomly selected from the larger study sample and contacted to participate (Figure 1). Out of the 20 participants, thirteen were available and included five HCPs (i.e., two oncologists, one oncology nurse, one occupational therapist, one physical therapist), three patients, two informal caregivers and three volunteers.

Figure 1: Participant selection for Fuzzy Cognitive Mapping (FCM) sessions. *Two patients dropped out due to sickness, three caregivers and two volunteers were not available to join the sessions.



Setting

The study took place at the breast and gynecologic cancer clinics of a university-affiliated hospital in Montreal, Qc, Canada.

Procedures

The larger study was presented during tumor boards and nursing rounds, and flyers were posted in the breast and gynecologic cancers clinics. A community volunteer-based organisation also sent the study flyer to volunteers, patients, and informal caregivers via their monthly newsletters. All interested participants contacted the study team by email to express interest in participating. The research coordinator then contacted them by phone to explain the study procedures and verify eligibility. If eligible, participants were sent the link to the e-consent form to read and consent. For the FCM segment, twenty participants were randomly selected and received an e-invite to participate. While confirming a common time for each group members, two patients dropped off due to sickness, three caregivers and two volunteers withdrew their participation due to lack of time.

The thirteen remaining participants received a link to join the e-sessions with instructions on how to access and login via TEAMS software. They were given the choice to login using their name or a nickname for anonymity. They were free to open or close their video and use private chat to communicate their ideas. A trained facilitator with previous experience in conducting focus groups and creating fuzzy cognitive maps led the mapping sessions. During an initial piloting with one group, we confirmed the steps for creating the maps, the prompt questions, and the need of having different sessions by stakeholder group to avoid conflicts from divergent opinions.

The facilitator started each FCM session by explaining its objectives and methodology. She shared her screen to livestream the concept map development on mental modeler software -an online collaborative modeling tool to facilitate participant engagement, systems-thinking and reasoning (www.mentalmodeler.org)[39]. Once participants confirmed they understood the mapping process, the facilitator started by writing the main outcome (best/optimal cancer care team functioning) in the central position of the screen and then invited participants to identify factors linked to the outcome by asking: “Based on your experience as (e.g., HCP, patient, informal caregiver or volunteer), what are the factors that you think contribute to a good functioning of cancer care teams?” As prompt questions, the facilitator also asked participants to identify barriers to an optimal team functioning and challenges experienced during COVID-19. Participants developed a list of factors that they perceive relevant to optimal cancer care team functioning. When there were duplications, similar ideas were grouped together. Next, participants were asked to indicate perceived cause—effect relationships between factors using arrows to indicate the direction of the relationship. After drawing all the arrows, the facilitator asked participants to weight them to indicate perceived strength of influence on each connection, from –10 to +10. [40-42]. Negative values correspond to inverse relationships and positive values indicate direct ones. Values closer to -10 and 10 are considered the strongest in contrast with values closer to 0. Participants used consensus to resolve disagreements about the content of the map.

Maps analysis

Mental modeler produced adjacency matrices for the graphical maps. Adjacency matrices are square tables in which each row and column has the name of a factor on the map. The cells indicate the weight of the relationships from causes (factors in the row) to their outcomes (factors in the column). We copied all the identified factors and listed them in one table for standardization (i.e., assigning standard names to the factors with the same meaning but different wording). Two researchers (SA and IS) reviewed all the original factors to unify the labelling. For each adjacency matrix with standardised labels, we calculated fuzzy transitive closure (TC) using CIETmap 2.2. [43] This mathematical framework identifies both direct and indirect causal links, determining the strongest influence that a node can have over others. We combined the transitive closure maps of all HCPs into an average map to compare it with the maps of patients, informal caregivers, and volunteers.

Following an inductive approach, based on notes and recordings from the mapping sessions, SA and IS grouped the standard factors into categories. We then condensed each of the stakeholder maps into category maps, in which the category-level cumulative weight is the sum of the weights of the factor-level relationships grouped in the category. To compare category-level weights on a similar scale, we divided all the summations by the highest value across them (cumulative influence). Values closer to 1 or -1 indicate stronger influences, while those closer to 0 means weaker influence.

Results

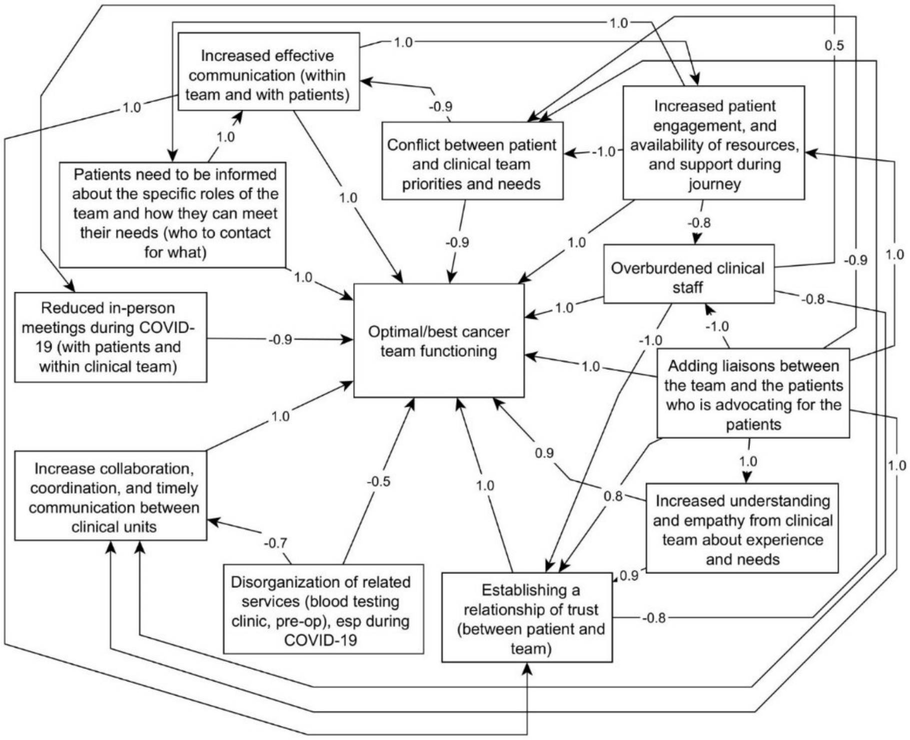
The virtual mapping involved a total of 13 participants with mean age of M=53; SD= 12.6, a minimum of 34, and a maximum of 71 years old. 84.6% of the sample were female and Caucasians. Gender, ethnicity, and education levels of participants are available in Table 1.

Table 1: FCM participant characteristics

	N
Biological sex/Gender	
Male	2
Female	11
Ethnicity	
Caucasian/white	11
Chinese	1
Prefer not to answer	1
Highest education level	
Undergraduate bachelor	5
Professional degree	3
Master’s degree	3
Post-doctoral degree	1
Other	1

Participants understood the mapping process relatively quickly, felt comfortable interacting with other group members, and expressed their appreciation to share their opinions. A total of 7 unique fuzzy cognitive maps were generated, with two oncologists (map #1), a nurse (map#2), a physical therapist (map#3), an occupational therapist (map #4), three patients (map#5), two informal caregivers (map#6) and three volunteers (map #7). Figure 2 displays one of the maps. Across all the maps, participants reported 79 unique factors that we condensed into 15 categories. Appendix I includes the adjacency matrices of the category maps and the standard factors in each category. We report below strongest categories depicted in each group followed by findings from the combined map of all stakeholders.

Figure 2: A sample of a fuzzy cognitive map developed using mental modeler with each arrow corresponding to a specific assigned weight from -10 to +10.



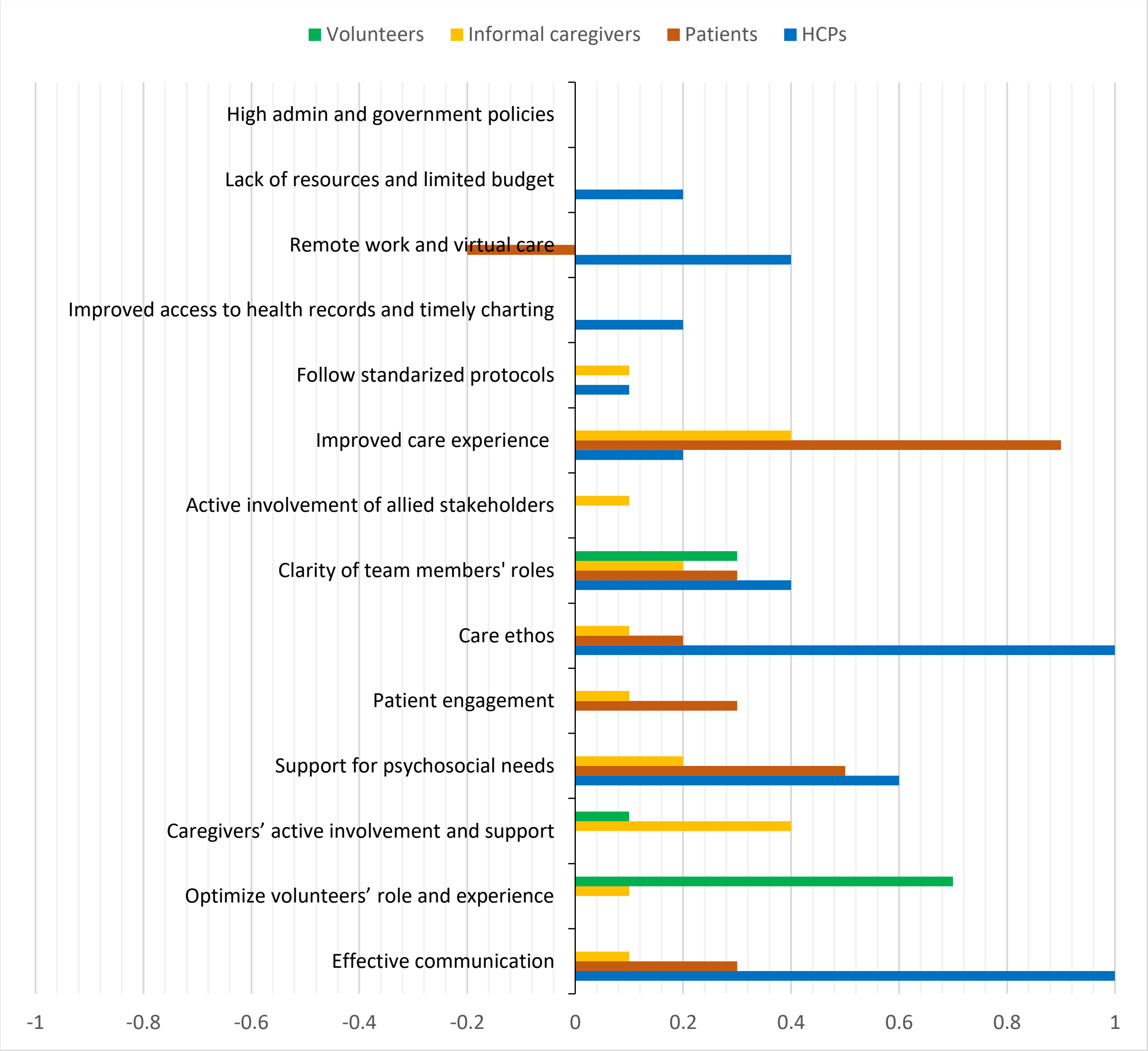
Categories with highest influence on optimal cancer care team functioning

The analysis showed contrasting views regarding the influence of each category on optimal cancer care team functioning across stakeholder groups (Figure 3). In the HCPs' map, categories of effective communication and the philosophy of care had the highest influence. In the patients’ and informal caregivers’ maps, the preeminent category was improved care experiences. In contrast, informal caregivers and volunteers had unique categories with highest influence on optimal team functioning close to their roles, which did not resonate with other groups:

Caregivers’ active involvement and support: In this category, informal caregivers suggested four factors contributing positively to optimal functioning. These included HCPs actively involving caregivers in care-related decision making, mentoring caregivers (by volunteers with past experiences), providing them with more training and informational sessions and supporting them to optimize their role. In contrast, caregivers perceived that their feeling of being undervalued and unheard by the team, influence negatively optimal team functioning.

Optimizing volunteers’ roles and experiences: This category included six main factors perceived by volunteers as positive contributors to optimal cancer care team functioning. These include leveraging the expertise of volunteers with prior cancer experience, profile matching with patients (e.g., similar cancer diagnosis), additional training and informational sessions, regular meetings between volunteers to share experiences and effective supportive strategies, the adoption of standardized reporting practices and recognizing volunteers as integral team members.

Figure 3: Cumulative influence of each category on optimal cancer care functioning by stakeholder groups



The combined map (i.e., HCPs, patients, informal caregivers, and volunteers) depicted five main categories with strongest influence on optimal cancer care team functioning. Table 2 displays the cumulative influences of the identified categories.

1- *Effective communication* category had the highest cumulative influence on optimal cancer care team functioning across all the maps. It includes open and timely communication between team members and clear communication channels with patients and with other healthcare departments. As barriers to optimal cancer care team functioning, participants noted the lack of regular check-ins across multidisciplinary team members, the lack of opportunities to discuss care management during the pandemic and the reliance on personal devices for communication with team members and patients.

2- *Improved care experiences* had the second highest influence on optimal team functioning overall. In this category, participants reflected on practical needs that would improve the care experience and positively influence team functioning. More specifically, participants stated that improving the testing phase (e.g., wait time and coordination during blood tests and x-rays) and allocating specific parking zones for patients and caregivers have positive influences on the overall care efficiency. As negative factors challenging team functioning, participants identified the lack of trust between patients and their HCPs and the healthcare system, the misalignment on needs and preferences and the limited time available for HCPs to follow up with patients and caregivers.

3- *The philosophy of care* (care ethos) had the third highest influence on the outcome across all maps. It reflected the need for reinforcement of care ethos within the team and included respect for patient's autonomy, compassion and empathy, patient-focused care, and a common philosophy of care, respect, and equality towards patients and with colleagues. The factors negatively influencing optimal team functioning included a healthcare environment that is inconducive to caring ethos, doctors' approaches that are often compromised and challenged and the decrease in patient care quality.

4- *Support for psychosocial needs* category included increased referrals to allied HCPs and external support resources (e.g., community-based organizations), new roles/resources for psychosocial support created during the pandemic, and the presence of a patient advocate or more nurses pivot to advocate for patients needs and act as a liaison between them and the healthcare system. On the other hand, the reduced in-person support provided by caregivers during the pandemic, paired with the limited access to supportive resources were identified as barriers to optimal team functioning. Other barriers listed in this category included HCPs' burnout, physical and mental isolation during the pandemic, lack of downtime and limited resources to support HCPs.

5- *Clarity of team members' roles* category included the importance of defining and clarifying the role of cancer team members, understanding the responsibilities of volunteers as well as setting boundaries and clear expectations. One factor had a negative influence on team functioning which is the power shifting towards the role of nurses and admin staff while the main responsibility remaining on physicians.

Table 2: Highest influences of categories on optimal cancer care team functioning across stakeholders' maps. The number in parenthesis indicates the relative position in relation to the strength of all the influences on optimal cancer care team functioning with 1 being for the strongest influence.

Category	All maps (7 maps)	HCPs (4 maps)	Patients (1 map)	Informal caregivers (1 map)	Volunteers (1 map)
Effective communication	0.8 (1)	1.0 (1)	0.3 (3)	0.1 (5)	0
Optimize volunteers' role and experience	0.4	0	0	0.1 (5)	0.7 (1)
Caregivers' active involvement and support	0.4	0	0	0.4 (1)	0.1 (3)
Support for psychosocial needs	0.7 (4)	0.6 (3)	0.5 (2)	0.2 (3)	0
Patient engagement	0.2	0	0.3 (3)	0.1	0
The Philosophy of care	0.8 (3)	1.0 (2)	0.2	0.1 (5)	0
Clarity of team members' roles	0.7 (5)	0.4 (4)	0.3 (3)	0.2 (4)	0.3 (2)
Active involvement of allied stakeholders	0.1	0	0	0.1	0

Improved care experience	0.8 (2)	0.2	0.9 (1)	0.4 (1)	0
Follow standardized protocols	0.1	0.1	0	0.1 (5)	0
Improved access to health records and timely charting	0.1	0.2	0	0	0
Remote work and virtual care	0.1	0.4 (5)	-0.2	0	0
Lack of resources and limited budget	0.1	0.2	0	0	0
High admin and government policies	0	0	0	0	0

Discussion

Participants described a complex network of interacting factors perceived as contributors or barriers to optimal cancer care team functioning during COVID-19 and beyond. Factors influencing cancer care team functioning and their respective level of influence varied among groups, reflecting different perceptions among individuals involved in the same cancer care team. The application of the FCM technique and its analysis facilitated the visualization and comprehension of these contrasts. The shared mental model created by combining all stakeholders' maps, pinpointed five pivotal categories: effective communication, improved care experiences, the philosophy of care, support for psychosocial needs and clarity of team members roles and responsibilities.

Consistent with our findings, the literature underscores the importance of effective communication as a key element in high-performing teams. [44,45] Effective communication comprises interactive, timely, team-based approaches and ongoing enhancement of team members' communication skills. Effective communication also extends beyond team members and includes communication with patients and their families and optimal patient-clinician relationships. Improved care experiences stood out as the highest influence category on the outcome in the patients and caregivers maps and had the second highest cumulative weight in the combined map. The literature documents significant relationships between positive care experiences and team-based care in high functioning teams. [46-48] More specifically, our findings reveal that enhancing the screening and testing phase experience and allocating parking spaces to patients and their caregivers were identified as two practical needs to be addressed for a positive care experience and consequently a better team functioning. Parking complaints and wait times for medical procedures (e.g., blood tests, imaging) are common and often cited in literature as contributors to negative patient experiences. In a study examining patient experiences in ambulatory cancer care, participants highlighted the stress and anxiety they often experienced from trying to find a hospital parking spot and its associated cost. [49] Moreover, reducing waiting times -a key metric for assessing the efficiency of cancer care, require clinical teams to collaborate and engage in care redesign and delivery. [50]

The philosophy of care had the third highest cumulative influence on optimal cancer care team functioning in the combined map and emerged as the second highest influential category in the HCPs map. The philosophy of care revolves around the guiding principles, values, and philosophy that underpin the delivery of care to individuals with cancer. [51] It plays a vital role in ensuring that cancer care is holistic, patient-centered, compassionate, and aligned with the best interests of patients. [52] HCPs frequently encounter ethical dilemmas stemming from time constraints, burnout, limited resources, end-of-life decisions, organizational demands, and external pressures such as the pandemics. [53-56] While institutional strategies and comprehensive training programs are integral to addressing ethical concerns, there is a need for evidence-based research and co-designed interventions to explore how the philosophy of care principles relate to effective team performance and to support HCPs in upholding these principles during pandemics.

Support for patients and HCPs' psychosocial needs had the fourth highest cumulative influence in the combined map. The realities of the COVID-19 cancer care era resulted in a multifold increase in HCPs distress and intensified burnout negatively influencing job performance. [57] Several individual and team interventions to help reduce burnout and addressing psychosocial needs for HCPs have been proposed including streamlining workflow, reducing administrative burdens, fostering engagements with colleagues, organising peer or grief support groups, offering mental health hotlines, and increasing timely access to mental health specialists [58-61]. These recommendations are promising, but their effectiveness has yet to be tested.

Role clarity had the fifth highest influence in the combined map. A lack of well-defined boundaries and vague scope of practice definitions undermine effective teamwork. [62] For instance, clarifying roles and understanding each team member's responsibilities are recognised as crucial elements for effective interprofessional collaboration and successful delivery of integrated cancer practices. [63,64] Clarifying roles also applies to volunteers. A review by Bloomer & Walshe identified a lack of role clarity and raised the fundamental question of whether volunteers are considered integral part of the team or serve as a complementary resource. [65,66] Our findings revealed that informal caregivers and volunteers had distinct opinions contrasting other stakeholders' groups. For instance, optimizing their roles and providing them with training and support had the highest influence on optimal cancer team functioning. In accordance with our results, the literature documents a lack of training and supportive interventions for informal caregivers that aim to ease the difficulties and challenges they experience. [67,68] Similarly, providing volunteers with necessary training can facilitate a collaborative and synergistic approach between them and HCPs ultimately leading to a more coherent team functioning. [69]

Strengths and limitations

The use of FCM technique enabled study participants to express their perceptions in a natural and nuanced way irrespective of their different profiles and backgrounds. This approach was simple and convenient to the pandemic period given its flexibility to be implemented virtually. Having an experienced facilitator was also an important factor in our study to encourage an open sharing between participants. Although the maps represent perceived relationships and cannot be interpreted as predictive models, findings from the combined map may help in bridging the differences between various stakeholders. For instance, categories with highest influence on optimal team functioning might serve as initial points of discussion for teams looking for strategies to enhance or sustain their team functioning.

This study has some limitations. First, participants did not contribute to the thematic analysis to develop the broader causal categories, this work was done solely by the authors. Appendix I provides all the factors included in each category. Second, we recognize that findings might not be generalized to other healthcare teams. However, FCM was a flexible technique, well received by participants and can be replicated in other healthcare settings. Last, FCMs are primarily static models that represent relationships among concepts at a single point in time. Therefore, they do not capture dynamic processes or their evolution over time.

Conclusion

The growing interest in shared mental models is prompted by their demonstrated benefits for team efficiency, functionality, and strategy. Collaborating effectively around the most influential factors depicted in the shared mental model could be a promising means to co-develop strategic priorities aiming to enhance team functioning. A future deliberative dialogue could serve as a forum where team members can discuss findings and potential interventions to optimize team functioning and readiness for future pandemics.

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CHAPTER 4: DISCUSSION

The overall goal of this dissertation is to provide an in-depth understanding of cancer team functioning during the COVID-19 pandemic and beyond. Through mixed methods, diverse stakeholders (i.e., patients, HCPs, informal caregivers, and volunteers) self-reported their experiences through questionnaire completion and mapping interactive sessions. More specifically, throughout study tasks, participants were asked to share their perspectives on team effectiveness, relational team coordination and key elements contributing to optimal cancer team functioning.

In this section, the main contributions of the three dissertation manuscripts are discussed as they relate to theory, clinical practice, education, and research.

Contributions to theory: Further delineating concepts related to cancer care team functioning

Across all three manuscripts, findings have implications for theorizing about team functioning and our understanding of related concepts. As such, existing team functioning theories include specific constructs that aim to predict team dynamics and performance. These constructs include team communication (i.e., timely, accurate, frequent), coordination, trust, problem-solving, cohesion, leadership, and decision-making. [1-3] Dissertation findings expand upon existing conventional concepts to incorporate pandemic-specific ones depicted in the narrative review and reported by participants across study tasks. This expansion of concepts provides a more comprehensive understanding of the functional dynamics within cancer care teams during health crises.

For instance, the narrative review delineated three concepts relevant to cancer team functioning during the pandemic. The first concept is *virtual communication and interprofessional collaboration* representing an essential strategy for maintaining team functioning amidst physical distancing measures [4-6]. The second is *team resilience* underscoring the capacity of cancer care teams to adapt, persevere, and innovate in the face of adversity, safeguarding the continuity of patient care [6-9]. The third concept is *HCPs' self-care and team support*, highlighting the imperative of attending to the well-being and resilience of team members to sustain their capacity to work during challenging circumstances.

Fuzzy cognitive mapping presented in Manuscript #3 with distinct groups of stakeholders also led to the identification of unique concepts not previously associated with optimal cancer team functioning and reported by groups (e.g., patients, lay carers) whose perspectives had not been sought before. Five categories with the highest influence on team functioning emerged: *effective communication, enhanced cancer care experiences, the philosophy of care, psychosocial support for patients and HCPs, and role clarity (HCPs and lay carers)*. In addition, unique concepts perceived by informal caregivers and volunteers as most influential for team functioning included *optimizing their roles* for more involvement in team functioning and *more training and support*.

In rethinking the conceptualization of cancer team functioning, it is therefore imperative to consider the concepts depicted by multi-stakeholders involved in cancer teams. A comprehensive and more inclusive approach can lead to more effective, and co-designed team functioning strategies while facing challenging situations such as public health crises.

Contributions to clinical practice: Re-assessing priorities

Clinically, the dissertation findings emphasize the need for regular reassessment of team functioning priorities. Findings can be revisited by administrators, clinical heads, and clinicians to co-develop strategies aiming to enhance overall team effectiveness and functional preparedness for future pandemics. Role clarity, the well-being of HCPs, and the philosophy of care were particularly salient (Chapters 1 and 3), and each is reviewed in turn.

Role clarity. Our findings suggest that revising and redefining team members' roles and responsibilities is a crucial step for optimal team functioning (Chapter 3). Role clarity was reported across all stakeholders’ groups as a strong contributor to team functioning. Consistent with our findings, the literature reports that clarifying roles remains a challenging process for teams. [10,11] Developing a systematic process for role clarification is therefore important for effective performance. For instance, clear role definitions establish a structured framework that aligns each member’s responsibilities with collective team goals, minimizes misunderstandings, and avoids duplication of efforts, fostering a cohesive work environment. [10] By delineating specific duties and expectations, team members gain a better understanding of their contributions to the overall team objectives.

The clarity of roles also helps patients and informal caregivers to know whom to approach for specific concerns or queries. Similarly, setting clear expectations from volunteers within the cancer team is necessary to optimize their contribution and streamline overall team functioning. However, it is worth noting, that respective roles are not static; they evolve with patients' needs, preferences, HCPs' experience, and the complexity of specific situations such as pandemic outbreaks and practice changes. As such, roles need to be revisited, redefined, and updated as needed.

Prioritizing self-care and well-being among team members. Self-care and access to support were depicted as key attributes for enhancing team functioning during the pandemic (Manuscripts #1 and #3). Increasing team member access to supportive programs was recommended to strengthen their resilience and ability to function in challenging times. Supportive programs include counselling services, stress management/coping mechanism workshops, resilience-building activities, and peer support groups.

Philosophy of care. HCPs identified the philosophy of care as one of the strongest attributes influencing team functioning (Manuscript #3). This finding emphasizes the critical importance of fostering a culture deeply rooted in compassionate care and patient-centeredness within cancer care teams. This might involve initiatives such as training programs that focus on nurturing empathy, active communication and listening skills and mutual respect among all members involved in cancer care. Enhancing the principles of the philosophy of care within the clinical setting and seeking feedback from patients and staff, help ensure that care delivery remains deeply rooted in person-centred principles.

Contributions to education: Enhancing healthcare professionals' training

The dissertation findings make significant contributions to the education of HCPs by integrating training in virtual technologies, emphasizing the importance of inclusive practices, and promoting collaborative exchanges among formal and informal stakeholders. Findings from the narrative review, for instance, contribute to acknowledging the importance of preparing future healthcare team members for effective virtual interprofessional collaboration and communication to meet the evolving demands of team functioning and healthcare delivery. The literature reports that the regular use of virtual care beyond the pandemic may lead to more effective and sustainable models of care. [12] Educational programs and training modules such as virtual communication skills, technology proficiency and virtual team-based learning are therefore essential to ensure that future professionals are well-equipped with the technological advancements in healthcare.

Findings also emphasize the crucial role of informal carers as integral members of cancer teams. Recognizing the contributions of informal caregivers and volunteers underscores the importance of inclusive training programs that prepare professionals to collaborate effectively with diverse team members. By learning how to be more inclusive and inviting diverse points of view, HCPs can foster a more collaborative and patient/family-centred approach to care delivery.

Contributions to research: Closing gaps and opening new avenues

This dissertation work offers significant contributions to the field of cancer care research by gathering much-needed data on multi-stakeholders' perceptions of team effectiveness and relational coordination and identifying factors contributing to team functioning during the pandemic and beyond. The use of mixed methods offers complementary research approaches for gaining a more holistic depth of cancer team functioning. The integration of quantitative (i.e., self-reported validated e-measures) and qualitative (i.e., Fuzzy Cognitive Mapping) methods allows us to capture both the objective outcomes (i.e., TE/TRC) and the subjective perceptions (i.e., mental models).

Our findings support broadening the definition of a cancer team beyond HCPs and emphasizing the inclusion of patients, informal caregivers, and volunteers as integral members. For instance, with half of our study participants (i.e., patients, informal caregivers, and volunteers) reporting not feeling acknowledged as team members, and the strong correlations between patient perceptions of team functioning and their cancer care experiences (Chapter 2), it is crucial to re-examine the clinical significance of achieving better alignment among all involved and integrating multi-stakeholders' inputs in team functioning processes. By valuing patients, informal caregivers, and volunteers, and incorporating their unique perspectives, we can ensure that team functioning processes align with their priorities, needs and preferences.
As we move forward, multi-stakeholders' engagement should not be considered a mere procedural step but as a substantive source of insight that shapes every facet of team performance.

Future research avenues include conducting a more thorough investigation into the influential factors depicted in the mental models' maps (Manuscript # 3) and validating their impact on patient outcomes (e.g., the impact of clarity of role on patient experiences). Another opportunity includes consolidating various attributes of cancer team functioning, into a comprehensive and standardized measure. For instance, the existing validated measures for team functioning were designed to assess teamwork, communication, collaboration, and overall team performance within healthcare settings. Each measure focuses on different dimensions of team functioning, and selecting the most appropriate one depends on the context and study objectives. While designing this dissertation series of studies, an initial literature search indicated that team effectiveness and relational coordination are two separate quality indicators of team functioning. Relational Coordination by Gittel et al., 2000, 2006 [3, 13] and the Patient/Family and HCP Perceptions of Team Effectiveness by Kilpatrick et al. 2019 [14, 15], were therefore considered as two complementary measures to assess perceptions of team functioning. Future studies with larger samples are recommended to document the convergent and discriminant validity of these measures to cancer team functioning.

Knowledge Translation

Knowledge translation in the context of this dissertation work, is defined as a dynamic and iterative process that includes synthesis, dissemination, exchange, and ethically sound application of findings to improve cancer team functioning.[16]

Findings from this dissertation work will be disseminated to various stakeholders including researchers and HCPs, so that these guide future research endeavours, and inform team functioning-related decisions while leveraging the voices of patients, informal caregivers, and volunteers. Findings will be presented at cancer teams' tumor boards staff meetings, as well as at different national and international conferences such as the Canadian Association of Psychosocial Oncology (CAPO) and the annual International Congress for Psychosocial Oncology (IPOS). Findings will also be published in the publication of journal articles. The narrative review (Manuscript #1) has been published in *Current Oncology*,[6] Manuscript #2 is under review in the *Journal of Multidisciplinary Healthcare* and Manuscript #3 was submitted to the *International Journal of Care Coordination*.

In addition, the dissertation introduces a stepwise approach to knowledge translation. A future deliberative dialogue represents a powerful simultaneous mechanism for knowledge synthesis, exchange, and dissemination of knowledge. For instance, a deliberative dialogue serves as a forum where we join cancer team members, patients, informal caregivers, and volunteers to discuss our findings. This process differs from other methods, such as focus groups, by the use of scientific evidence as a starting reference to open discussion. [17,18] Joining together various stakeholders can stimulate exchanges while underscoring unique and contrasting perspectives. It may contribute to the notion of a mutual understanding of what constitutes optimal team functioning and may thus facilitate the translation of evidence into team interventions. [19]
The proposed deliberative dialogue consists of the following main steps: 1) Sharing evidence (i.e., Manuscripts #1, #2 and #3), 2) Discussing and reflecting upon findings *(e.g., What is your response to the findings presented? Is the evidence aligned with (or contradicts) your perceptions? How do you think the findings impact team functioning and cancer care?)*, and 3) Identifying priority actions *(e.g., Based on the evidence presented, if you could choose 2–3 modifications that would bring rapid improvement to cancer teams functioning, what would they be? If you could choose 2–3 modifications that might take more time but would have a sustainable high team functioning, what would they be? What category of the most influential ones, would you consider a priority to address and why?)*.
Overall, deliberative dialogue can promote an inclusive, informed, and participatory approach for cancer teams to optimize their decision-making and to plan the next steps.

CONCLUSION

The COVID-19 pandemic has undeniably reshaped healthcare, revealing critical lessons for clinicians and their teams, and providing deep insights into the optimization of team functioning during and beyond the pandemic. This dissertation provides valuable data that can readily inform the building back of stronger teams with more preparedness and resilience. The quantitative and qualitative evidence gathered pointed to how important the search and integration of multi-stakeholders' input is. Insights gained also reiterated the need to expand existing conceptual frameworks on team functioning to include more contemporary ones, to re-examine healthcare priorities for enhanced preparedness and to co-create team functioning guidelines. As such, findings from this dissertation intersect with emergent upstream movements of co-design, value-based and strength-based healthcare [20]. Aligned with these movements' core principles, findings herein remind us of the importance of person-centred care, continued quality improvement initiatives, leveraging team strengths, fostering collaboration, and supporting situation-responsive systems. For instance, significant associations found between patient perceptions of team functioning and their cancer care experiences align with value-based healthcare's aim to not only contribute to healthcare systems but also to add value to patients' care experiences. Participants' high ratings of team effectiveness and relational coordination as reported by multi-stakeholders underscore the importance of sustaining quality and efficiency, core aims of value-based health care. Teams should maintain or even increase these standards through the leveraging of effective team dynamics and coordination.

The findings also highlight cancer team resilience during COVID-19, emphasizing adaptability while fostering a culture that acknowledges and utilizes individual and collective strengths to navigate crises. The focus on optimizing team members' self-care and support resonates with strength-based approaches that recognize the need for more empowering environments not only for patients and their families but also for all healthcare staff. Moreover, the involvement of various groups of participants (i.e., patients, HCPs, informal caregivers, and volunteers) in this dissertation research, aligns with co-design principles. Teams should continue to foster collaboration among these multi-stakeholders to co-create solutions that optimize team functioning.

Health care professionals together with patient representatives and lay carers can be inherent catalysts for rethinking and optimizing health care, particularly under challenging circumstances. Complementing these joint efforts with a strategic knowledge dissemination plan will undoubtedly contribute to building more robust healthcare systems.

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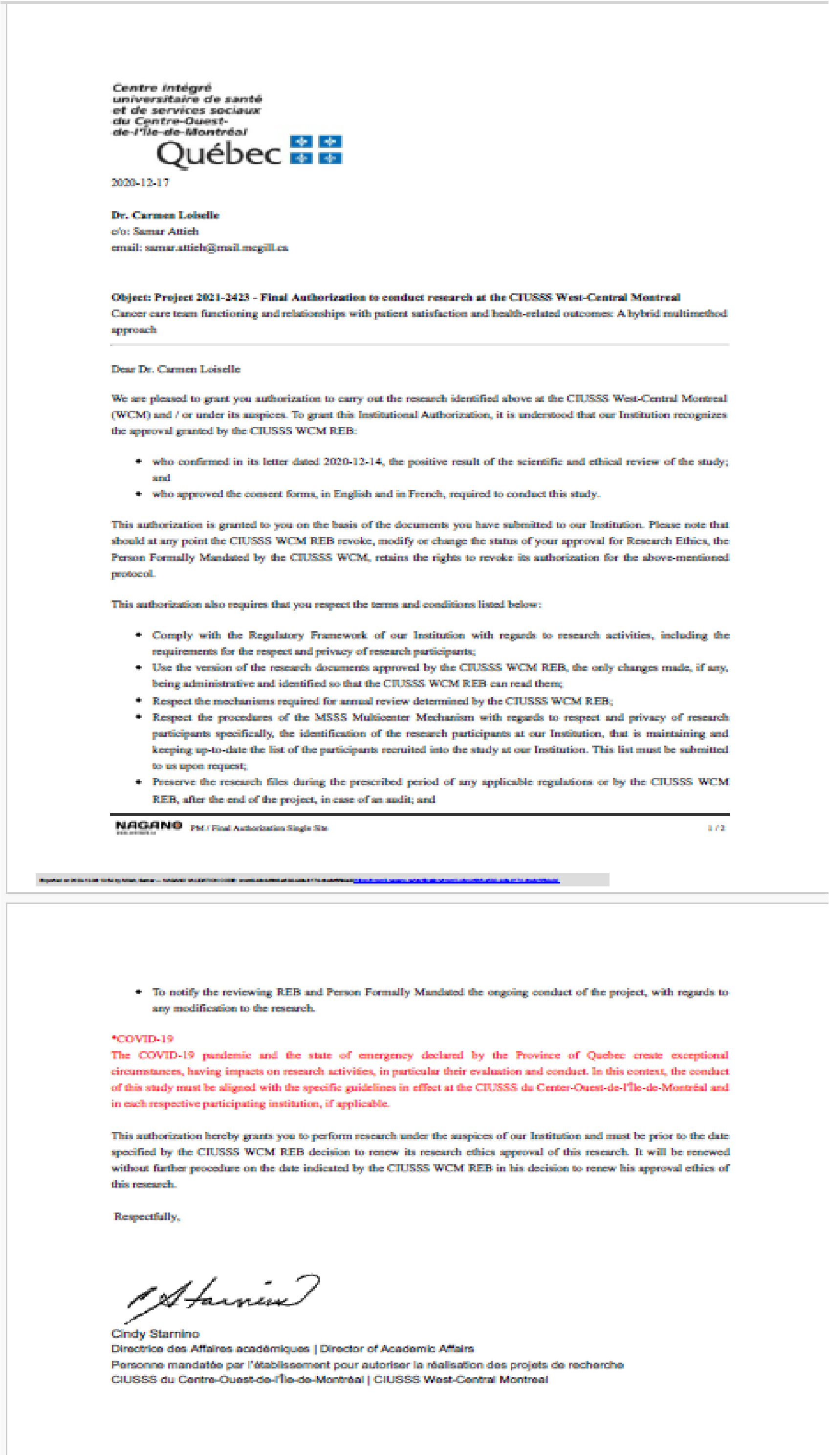
Appendices

Appendix A: CIUSSS West-Central Montreal ethics approval letter



Centre intégré
universitaire de santé
et de services sociaux
du Centre-Ouest-
de-l'Île-de-Montréal
Québec

2020-12-17

Dr. Carmen Loiselle
c/o: Samar Attieh
email: samar.attieh@mail.mcgill.ca

Object: Project 2021-2423 - Final Authorization to conduct research at the CIUSSS West-Central Montreal
Cancer care team functioning and relationships with patient satisfaction and health-related outcomes: A hybrid multimethod approach

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Dear Dr. Carmen Loiselle

We are pleased to grant you authorization to carry out the research identified above at the CIUSSS West-Central Montreal (WCM) and / or under its auspices. To grant this Institutional Authorization, it is understood that our Institution recognizes the approval granted by the CIUSSS WCM REB:

- who confirmed in its letter dated 2020-12-14, the positive result of the scientific and ethical review of the study; and
- who approved the consent forms, in English and in French, required to conduct this study.

This authorization is granted to you on the basis of the documents you have submitted to our Institution. Please note that should at any point the CIUSSS WCM REB revoke, modify or change the status of your approval for Research Ethics, the Person Formally Mandated by the CIUSSS WCM, retains the rights to revoke its authorization for the above-mentioned protocol.

This authorization also requires that you respect the terms and conditions listed below:

- Comply with the Regulatory Framework of our Institution with regards to research activities, including the requirements for the respect and privacy of research participants;
- Use the version of the research documents approved by the CIUSSS WCM REB, the only changes made, if any, being administrative and identified so that the CIUSSS WCM REB can read them;
- Respect the mechanisms required for annual review determined by the CIUSSS WCM REB;
- Respect the procedures of the MSSS Multicenter Mechanism with regards to respect and privacy of research participants specifically, the identification of the research participants at our Institution, that is maintaining and keeping up-to-date the list of the participants recruited into the study at our Institution. This list must be submitted to us upon request;
- Preserve the research files during the prescribed period of any applicable regulations or by the CIUSSS WCM REB, after the end of the project, in case of an audit; and
- To notify the reviewing REB and Person Formally Mandated the ongoing conduct of the project, with regards to any modification to the research.

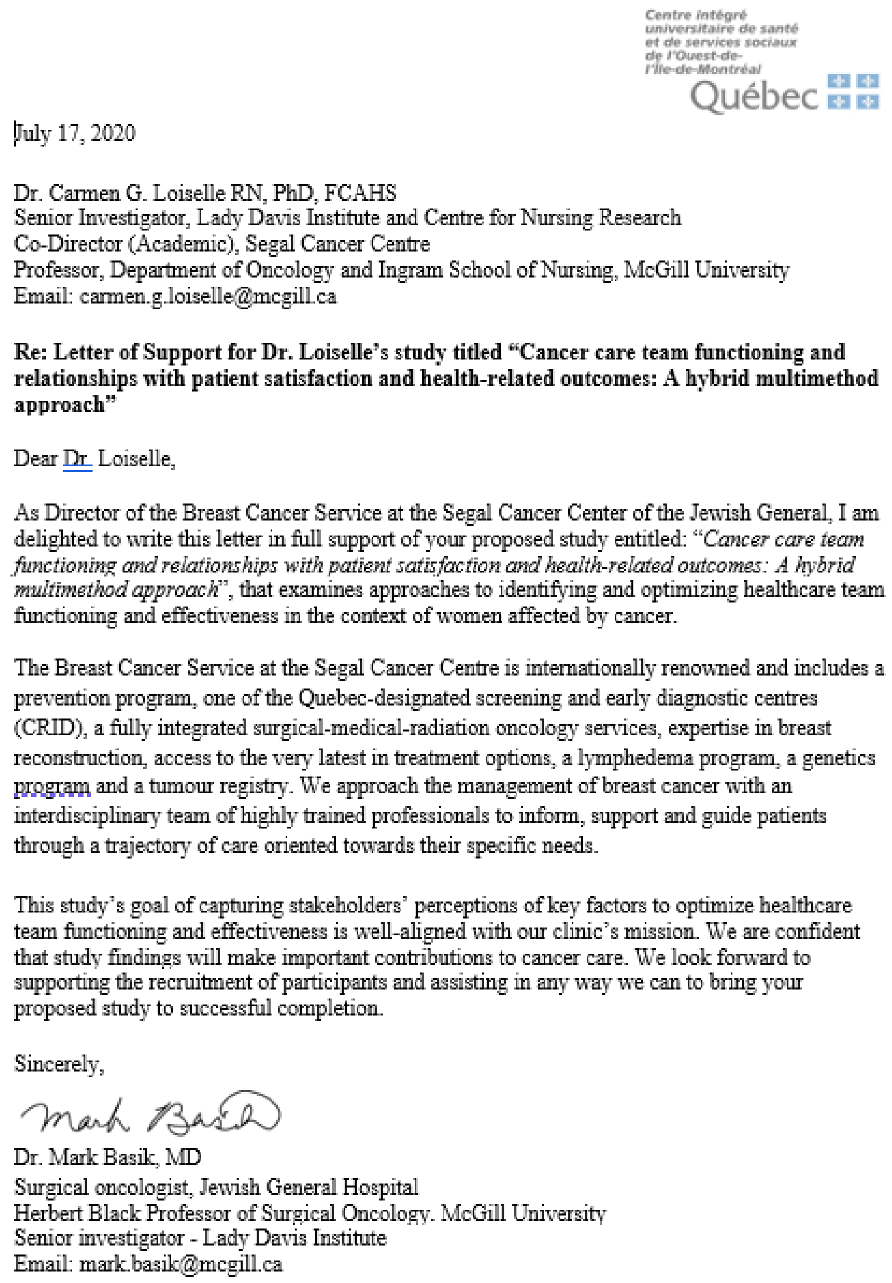
*COVID-19
The COVID-19 pandemic and the state of emergency declared by the Province of Quebec create exceptional circumstances, having impacts on research activities, in particular their evaluation and conduct. In this context, the conduct of this study must be aligned with the specific guidelines in effect at the CIUSSS du Center-Ouest-de-l'Île-de-Montréal and in each respective participating institution, if applicable.

This authorization hereby grants you to perform research under the auspices of our Institution and must be prior to the date specified by the CIUSSS WCM REB decision to renew its research ethics approval of this research. It will be renewed without further procedure on the date indicated by the CIUSSS WCM REB in his decision to renew his approval ethics of this research.

Respectfully,

Cindy Starnino
Directrice des Affaires académiques | Director of Academic Affairs
Personne mandatée par l'établissement pour autoriser la réalisation des projets de recherche
CIUSSS du Centre-Ouest-de-l'Île-de-Montréal | CIUSSS West-Central Montreal

Appendix B: Letters of support



Centre intégré
universitaire de santé
et de services sociaux
de l'Ouest-de-
l'Île-de-Montréal
Québec

July 17, 2020

Dr. Carmen G. Loiselle RN, PhD, FCAHS
Senior Investigator, Lady Davis Institute and Centre for Nursing Research
Co-Director (Academic), Segal Cancer Centre
Professor, Department of Oncology and Ingram School of Nursing, McGill University
Email: carmen.g.loiselle@mcgill.ca

Re: Letter of Support for Dr. Loiselle's study titled "Cancer care team functioning and relationships with patient satisfaction and health-related outcomes: A hybrid multimethod approach"

Dear Dr. Loiselle,

As Director of the Breast Cancer Service at the Segal Cancer Center of the Jewish General, I am delighted to write this letter in full support of your proposed study entitled: "*Cancer care team functioning and relationships with patient satisfaction and health-related outcomes: A hybrid multimethod approach*", that examines approaches to identifying and optimizing healthcare team functioning and effectiveness in the context of women affected by cancer.

The Breast Cancer Service at the Segal Cancer Centre is internationally renowned and includes a prevention program, one of the Quebec-designated screening and early diagnostic centres (CRID), a fully integrated surgical-medical-radiation oncology services, expertise in breast reconstruction, access to the very latest in treatment options, a lymphedema program, a genetics program and a tumour registry. We approach the management of breast cancer with an interdisciplinary team of highly trained professionals to inform, support and guide patients through a trajectory of care oriented towards their specific needs.

This study's goal of capturing stakeholders' perceptions of key factors to optimize healthcare team functioning and effectiveness is well-aligned with our clinic's mission. We are confident that study findings will make important contributions to cancer care. We look forward to supporting the recruitment of participants and assisting in any way we can to bring your proposed study to successful completion.

Sincerely,

Mark Basik

Dr. Mark Basik, MD
Surgical oncologist, Jewish General Hospital
Herbert Black Professor of Surgical Oncology, McGill University
Senior investigator - Lady Davis Institute
Email: mark.basik@mcgill.ca

Hôpital général juif
Jewish General Hospital
Centre du cancer Segal Cancer Centre

McGill

Walter H. Gotlieb, M.D., Ph. D.

Professor of Ob-Gyn and Oncology
Director of Surgical Oncology, Mcgill University
Chief, Department of Obstetrics and Gynecology, Jewish General Hospital

JGH-Gyn-Oncology
HGJ-Oncologie-Gynéco

July 24, 2020

Dr. Carmen G. Loiselle RN, PhD, FCAHS
Senior Investigator, Lady Davis Institute and Centre for Nursing Research
Co-Director (Academic), Segal Cancer Centre
Professor, Department of Oncology and Ingram School of Nursing, McGill University
Email: carmen.g.loiselle@mcgill.ca

Re: Letter of Support for Dr. Loiselle's study entitled "Cancer care team functioning and relationships with patient satisfaction and health-related outcomes: A hybrid multimethod approach"

Dear Dr. Loiselle,

As *Director* of *Gynecologic Oncology* at the Segal Cancer *Center* of the *Jewish General Hospital*, I am delighted to write this letter in full support of your proposed study entitled: "*Cancer care team functioning and relationships with patient satisfaction and health-related outcomes: A hybrid multimethod approach*", that examines approaches to identifying and optimizing healthcare team functioning and effectiveness in the context of women affected by cancer.

The Gynecologic Oncology program at the Segal Cancer Centre was established to concentrate on the study and treatment of gynecologic cancers, integrating prevention strategies, screening tools, detection methods, sophisticated diagnostic equipment, skillful pelvic and abdominal surgery, innovative chemotherapy protocols, hi-tech radiation therapy and best supportive care practices. Essential to the optimal management and treatment of each patient are the multitude of skills present in the multidisciplinary team of highly trained professionals. The proposed study goal of capturing stakeholders' perceptions of key factors to optimize healthcare team functioning and effectiveness is well-aligned with our clinic's mission. We feel that we are in an excellent position to support the recruitment of participants and are deeply committed to assisting in any way we can to bring your proposed study to successful completion.

Please feel free to contact me for any additional information.

Sincerely,

Walter H. Gotlieb, MD, PhD

Tel : (514) 340-8222 ext. 3114 Fax : (514) 340-8619 E-mail : walter.gotlieb@mcgill.ca
Address: 3755 Cote Ste Catherine Road, Montréal Québec H3T 1E2

Hôpital général juif
Jewish General Hospital

McGill

Institut Lady Davis de recherches médicales | Lady Davis Institute for Medical Research

Gerald Batist MDCM, C.M., C.Q., FRCP(C), FACP, FCAHS
Professor of Oncology / Professeur d'Oncologie - McGill
Director / Directeur
Segal Cancer Centre and the McGill Centre for Translational Research in Cancer
Centre du cancer Segal et Centre McGill de recherches appliquées au cancer
Deputy Director / Directeur adjoint
Lady Davis Insitute for Medical Research / Institut Lady Davis de recherches médicales

July 17, 2020

Dr. Carmen G. Loiselle RN, PhD, FCAHS
Senior Investigator, Lady Davis Institute and Centre for Nursing Research
Co-Director (Academic), Segal Cancer Centre
Professor, Department of Oncology and Ingram School of Nursing, McGill University
Email: carmen.g.loiselle@mcgill.ca

Re: Letter of Support for Dr. Loiselle's study entitled "Cancer care team functioning and relationships with patient satisfaction and health-related outcomes: A hybrid multimethod approach"

Dear Dr. Loiselle,

The Segal Cancer Centre at CIUSSS Centre-Ouest (based at the Jewish General Hospital) is eager to offer its strong support for your proposed study entitled: "*Cancer care team functioning and relationships with patient satisfaction and health-related outcomes: A hybrid multimethod approach*", that examines approaches to identifying and optimizing healthcare team functioning and effectiveness in the context of women affected by cancer.

The Segal Cancer Centre aims to provide the best quality of care to patients and family members by offering a wide range of services, including timely cancer treatment as well as tailored informational and psychosocial support. Our facilities provide a comprehensive approach to cancer care, combining cancer prevention and screening, diagnosis, treatment, and psychosocial support. Our previous experiences with your program of research were most enjoyable, successful, and rewarding for all involved. We feel that the Segal Cancer Centre is in an excellent position to continue to support the recruitment of your study participants and the proactive dissemination of the study's findings and recommendations.

We are delighted to support your exciting program of research and are deeply committed to assisting in any way we can to bring your proposed study to successful completion. We look forward to continued collaboration.

Sincerely,

Gerald Batist

Segal Cancer Centre / Centre du cancer Segal
The Sir Mortimer B. Davis Jewish General Hospital, 3755 chemin de la Côte-Ste-Catherine, Montréal, Quebec, Canada, H3T 1E2
Telephone: 514-340-8222 ext. 25418 Email: gerald.batist@mcgill.ca

HOPE & COPE
L'ESPOIR C'EST LA VIE

July 17, 2020

Dr. Carmen G. Loiselle RN, PhD, FCAHS
Senior Investigator, Lady Davis Institute and Centre for Nursing Research
Co-Director (Academic), Segal Cancer Centre
Professor, Department of Oncology and Ingram School of Nursing, McGill University
Email: carmen.g.loiselle@mcgill.ca

Re: Letter of Support for Dr. Loiselle's study entitled "Cancer care team functioning and relationships with patient satisfaction and health-related outcomes: A hybrid multimethod approach"

Dear Dr. Loiselle,

As a non-profit community organization committed to leading and supporting evidence-based research, Hope & Cope is pleased to continue our collaborations with your team and we strongly support your study entitled: "Cancer care team functioning and relationships with patient satisfaction and health-related outcomes: A hybrid multimethod approach."

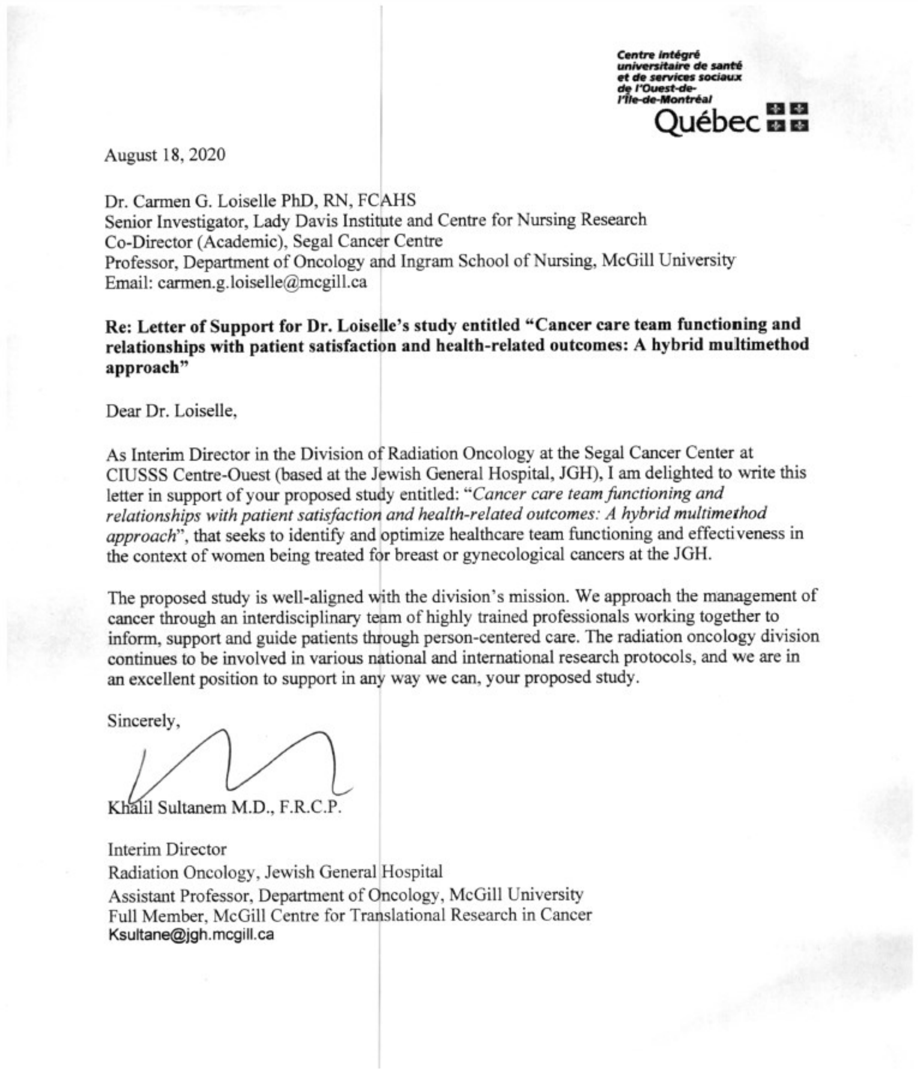
Hope & Cope, based at the Jewish General Hospital, includes health care professionals and over 400 volunteers who support individuals with cancer and their loved ones throughout the cancer trajectory. For over 35 years, Hope & Cope has been internationally recognized for our pioneering approach and evidence-based services: http://hopeandcope.ca/. As part its mandate, Hope & Cope is committed to testing sustainable approaches to meet patients' needs in a timely manner. We have a long-standing track record of collaborating on multi-centre trials with teams across Canada, including recruiting patients, caregivers, and health care professionals.

We are confident that this proposed study will be successful in informing the health care system and other important stakeholders about optimizing health care team functioning, thereby better meeting the needs of individuals with cancer. Approximately 1,400 new patients join the Hope & Cope program each year, so we are strategically placed to help recruit the participants needed for this study. At the study conclusion, we would like to assist in any way we can to broadly disseminate the study results.

We wish you the very best in this endeavor.

Sincerely,

Eric Amar, CPA, CGA
Executive Director
Hope & Cope
514-340-8255
Email: eric.amar.ccomtl@ssss.gouv.qc.ca



Centre intégré
universitaire de santé
et de services sociaux
de l'Ouest-de-
l'Île-de-Montréal
Québec

August 18, 2020

Dr. Carmen G. Loiselle PhD, RN, FCAHS
Senior Investigator, Lady Davis Institute and Centre for Nursing Research
Co-Director (Academic), Segal Cancer Centre
Professor, Department of Oncology and Ingram School of Nursing, McGill University
Email: carmen.g.loiselle@mcgill.ca

Re: Letter of Support for Dr. Loiselle's study entitled "Cancer care team functioning and relationships with patient satisfaction and health-related outcomes: A hybrid multimethod approach"

Dear Dr. Loiselle,

As Interim Director in the Division of Radiation Oncology at the Segal Cancer Center at CIUSSS Centre-Ouest (based at the Jewish General Hospital, JGH), I am delighted to write this letter in support of your proposed study entitled: "*Cancer care team functioning and relationships with patient satisfaction and health-related outcomes: A hybrid multimethod approach*", that seeks to identify and optimize healthcare team functioning and effectiveness in the context of women being treated for breast or gynecological cancers at the JGH.

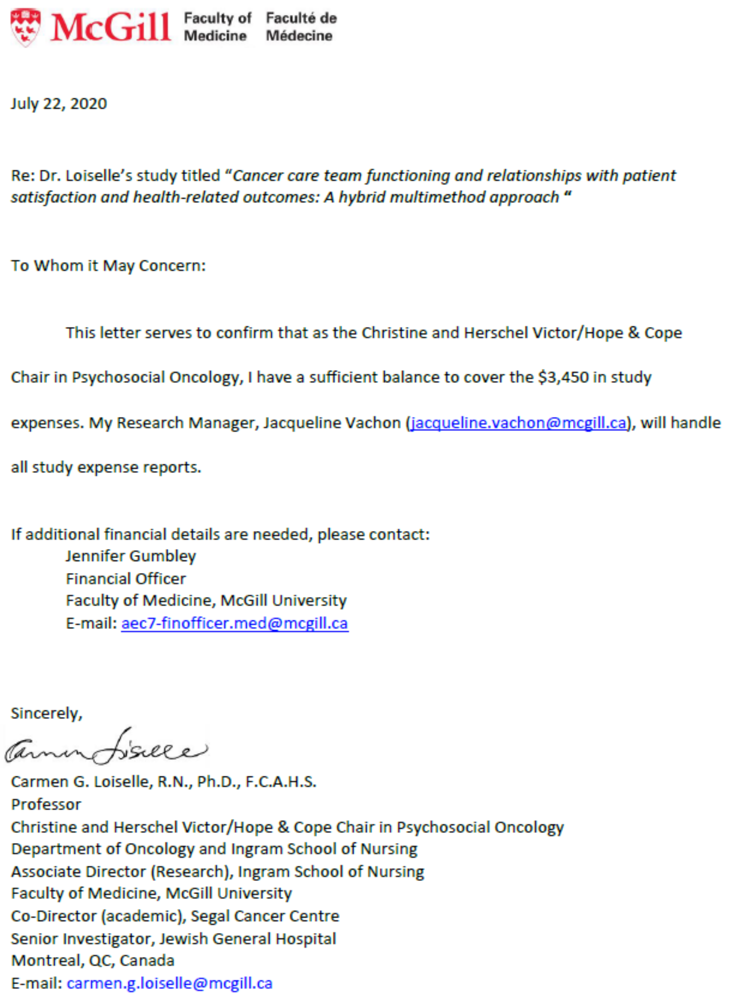
The proposed study is well-aligned with the division's mission. We approach the management of cancer through an interdisciplinary team of highly trained professionals working together to inform, support and guide patients through person-centered care. The radiation oncology division continues to be involved in various national and international research protocols, and we are in an excellent position to support in any way we can, your proposed study.

Sincerely,

Khalil Sultanem M.D., F.R.C.P.

Interim Director
Radiation Oncology, Jewish General Hospital
Assistant Professor, Department of Oncology, McGill University
Full Member, McGill Centre for Translational Research in Cancer
Ksultane@jgh.mcgill.ca

Appendix C: Budget



McGill Faculty of Medicine Faculté de Médecine

July 22, 2020

Re: Dr. Loiselle's study titled "*Cancer care team functioning and relationships with patient satisfaction and health-related outcomes: A hybrid multimethod approach* "

To Whom it May Concern:

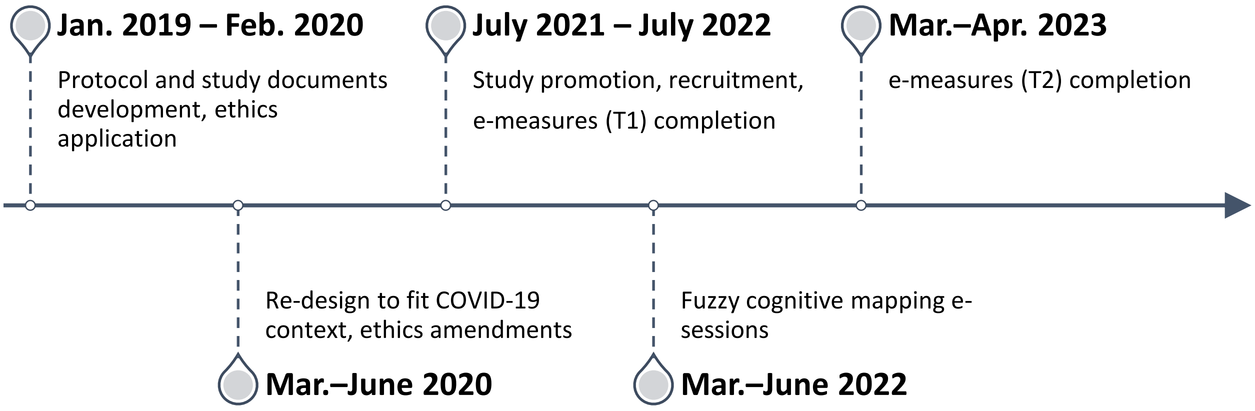
This letter serves to confirm that as the Christine and Herschel Victor/Hope & Cope Chair in Psychosocial Oncology, I have a sufficient balance to cover the $3,450 in study expenses. My Research Manager, Jacqueline Vachon (jacqueline.vachon@mcgill.ca), will handle all study expense reports.

If additional financial details are needed, please contact:
Jennifer Gumbley
Financial Officer
Faculty of Medicine, McGill University
E-mail: aec7-finofficer.med@mcgill.ca

Sincerely,

Carmen G. Loiselle, R.N., Ph.D., F.C.A.H.S.
Professor
Christine and Herschel Victor/Hope & Cope Chair in Psychosocial Oncology
Department of Oncology and Ingram School of Nursing
Associate Director (Research), Ingram School of Nursing
Faculty of Medicine, McGill University
Co-Director (academic), Segal Cancer Centre
Senior Investigator, Jewish General Hospital
Montreal, QC, Canada
E-mail: carmen.g.loiselle@mcgill.ca

Appendix D: Dissertation timeline



Appendix E: Presentations and promotions

DATE	MODALITY	DETAILS
JAN 18, 2021	Virtual	Study presentation to the Clinico-Administrative Coordinator at the Medicine and Oncology divisions (Karine LePage)
JAN 29, 2021	Virtual	Study presentation to the infirmières pivots (IPOs) working at the Segal Cancer Center (n = 15)
MAR 12, 2021	Virtual	Study presentation to the Gynecologic cancer team (n = 10)
FEB 19, 2021	Virtual	Study presentation to two IPOs seeing women with breast and gynecologic cancers (Lindsay Schwartz, Brandy Vanderbyl)
FEB 26, 2021	Virtual	Study presentation to the breast cancer IPO (Ana Buono)
MAR 2, 2021	Virtual	Study presentation to Gynecologic cancer IPO (Nancy Drummond)
MAR 18, 2021	Virtual	Study presentation to Hope & Cope Executive Director, (Eric Amar) and oncology program coordinator (Hinda Goodman)

MAR 19, 2021	Virtual	Study presentation to the oncology head nurse at the JGH oncology clinic (Kim Gartshore)
APR 7TH, 2021	Virtual	Study presentation to the Breast cancer team (n = 8)
SEPT 3, 2021	Virtual	Study presentation to Gynecologic cancer team (n = 10)
SEPT 9, 2021	Phone	Phone call to explain the study to the IPO in Geriatric oncology and Gynecologic oncology (Erika Martinez)
SEPT 27, 2021	In-person	Study presentation to the Gynecologic and Breast cancer administrative staff
OCT 12, 2021	Phone	Study presentation to the IPO for Head and Neck cancer (Gabrielle Chartier)
OCT 13, 2021	Social media	Study information posted on Hope & Cope social media platforms
OCT 19, 2021	In-person	Study presentation to the Breast cancer IPO (Ana Buono)
OCT 19, 2021	In-person	Study presentation to radiation oncology head nurse (Josina Van den Nieuwenhof)
OCT 25, 2021	In-person	Study presentation to the oncology nurses at the chemotherapy unit (n = 9)
OCT 29, 2021	In-person	Study presentation to the radiation oncology team (n = 12)
FEB 28, 2022	Newsletter	Study information and link to consent sent to patients and caregivers via Hope & Cope newsletter
MAR 21, 2022	In-Person	Study presentation to the IPO Geriatric oncology (Erika Martinez)
APR 5, 2022	Social media	Study information and link to consent posted on Hope & Cope social media platforms
APR 7, 2022	Newsletter	Study information and link to consent sent to patients and caregivers via Hope & Cope newsletter

Appendix F: Study posters EN/FR

Are you diagnosed with breast or gynecologic cancer?

Or accompanying someone going through this experience?

We'd like to discuss how you perceive the work of cancer teams during COVID-19!

You can take part if:

- You are getting cancer treatment at the JGH or have completed it within the past year
- OR You are a caregiver accompanying the patient for at least three months

If eligible, you will be invited to:

- Complete online self-report questionnaires (two times, 20 minutes)
- Possibly join a virtual group discussion - if chosen randomly (1 ½ hour – two times)

Find out more by scanning this code or contact Samar Attieh, Doctoral candidate at McGill University:

Loiselle.Lab.ccomtl@ssss.gouv.qc.ca
514-398-8977

This study is led by **Dr. Carmen G. Loiselle**, Professor at McGill University and Co-Director (Academic), Segal Cancer Centre

Loiselle lab · McGill · HOPE & COPE L'ESPOIR C'EST LA VIE · Centre intégré universitaire de santé et de services sociaux de l'Ouest-de-l'Île-de-Montréal Québec

Avez-vous reçu un diagnostic de cancer du sein ou gynécologique?

Êtes-vous l'aidant naturel ou l'accompagnateur de cette personne?

Nous aimerions connaître votre opinion sur le fonctionnement de l'équipe de soins en oncologie durant la COVID-19!

Vous êtes éligible si:

- Vous avez reçu un de ces diagnostics et suivez un traitement à l'HGJ ou avez terminé ce traitement dans la dernière année
- OU Vous accompagnez cette patiente depuis au moins trois mois

Nous vous demanderons de:

- Compléter des questionnaires en ligne (à deux reprises, 20 min.).
- Possiblement joindre un groupe de discussion virtuel - sélection aléatoire (pour deux séances, 1 h 30 chacune).

Pour plus d'information, veuillez scanner ce code ou communiquer avec Samar Attieh, doctorante à l'Université McGill.

Loiselle.Lab.ccomtl@ssss.gouv.qc.ca
514-398-8977

Cette étude est menée par **Carmen G. Loiselle**, professeure à l'Université McGill et codirectrice (académique), Centre du cancer Segal

Loiselle lab · McGill · HOPE & COPE L'ESPOIR C'EST LA VIE · Centre intégré universitaire de santé et de services sociaux de l'Ouest-de-l'Île-de-Montréal Québec

Study on Cancer Care Team Functioning

Are you a *health care professional* working with women with breast or gynecologic cancer?

We would like to hear from you!

We are conducting a study on health care professionals' perceptions of how team members work together

If you have been in this field and working at JGH, for at least, 3 months, you will be asked to:

- Complete online questionnaires
  - twice, 20-25 minutes each
- Join online group discussion (optional participation and based on a random selection of 5 participants)
  - up to 2 sessions, 1 to 1 ½ hours each

If you would like to know more about the study, contact

Samar Attieh, Doctoral candidate at McGill

By email: Loiselle.Lab.ccomtl@ssss.gouv.qc.ca

By phone: **514-398-8977**

This study is led by **Dr. Carmen G. Loiselle**, Professor at McGill University and Co-Director (Academic), Segal Cancer Centre

No compensation will be provided

Centre intégré universitaire de santé et de services sociaux de l'Ouest-de-l'Île-de-Montréal Québec McGill HOPE&COPE L'ESPOIR C'EST LA VIE Loiselle .lab

Étude sur le fonctionnement de l'équipe de soins en oncologie

Êtes-vous un ou une *prestataire de soins de santé* qui travaille avec des femmes atteintes d'un cancer du sein ou d'un cancer gynécologique?

Nous aimerions connaître votre opinion!

Nous effectuons une étude sur la façon dont les personnes perçoivent la collaboration entre les membres de l'équipe de soins en oncologie. **Si vous travaillez dans ce domaine à l'HGJ depuis, au moins, trois mois,** nous vous demanderons de:

- Remplir des questionnaires en ligne
  - à 2 reprises, durée de 20 à 25 minutes chacun
- Vous joindre à un groupe de discussion en ligne *(participation facultative et reposant sur une sélection de 5 personnes au hasard)*
  - pour au plus 2 séances, durée de 1h à 1h30 chacune

Si vous souhaitez en apprendre davantage sur cette étude, veuillez communiquer avec Samar Attieh, Doctorante à l'université McGill

Par courriel: Loiselle.Lab.ccomtl@ssss.gouv.qc.ca

Par téléphone: **514-398-8977**

Cette étude est menée par **Carmen G. Loiselle**, professeure à l'Université McGill et codirectrice (universitaire), Centre du cancer Segal

Aucune rémunération n'est offerte

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Study on Cancer Care Team Functioning

Are you *a volunteer in the* breast or gynecologic cancer departments?

We would like to hear from you!

We are conducting a study on people's perceptions of how team members work together

If you have been volunteering for, at least, 3 months, you will be asked to:

- Complete online questionnaires
  - twice, 20-25 minutes each
- Join online group discussion (optional participation and based on a random selection of 2 volunteers)
  - up to 2 sessions, 1 to 1 ½ hours each

If you would like to know more about the study, contact

Samar Attieh, Doctoral candidate at McGill

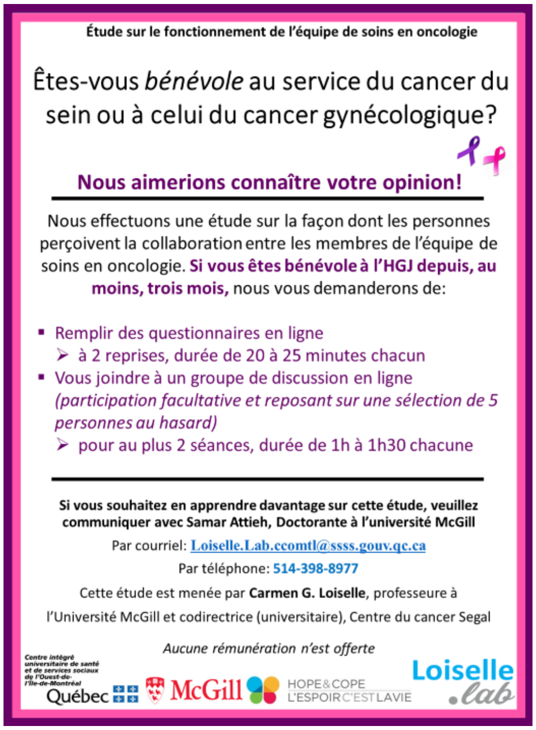
By email: Loiselle.Lab.ccomtl@ssss.gouv.qc.ca

By phone: **514-398-8977**

This study is led by **Dr. Carmen G. Loiselle**, Professor at McGill University and Co-Director (Academic), Segal Cancer Centre

No compensation will be provided

Centre intégré universitaire de santé et de services sociaux de l'Ouest-de-l'Île-de-Montréal Québec McGill HOPE&COPE L'ESPOIR C'EST LA VIE Loiselle lab



Étude sur le fonctionnement de l'équipe de soins en oncologie

Êtes-vous *bénévole* au service du cancer du sein ou à celui du cancer gynécologique?

Nous aimerions connaître votre opinion!

Nous effectuons une étude sur la façon dont les personnes perçoivent la collaboration entre les membres de l'équipe de soins en oncologie. **Si vous êtes bénévole à l'HGJ depuis, au moins, trois mois,** nous vous demanderons de:

- Remplir des questionnaires en ligne
  - à 2 reprises, durée de 20 à 25 minutes chacun
- Vous joindre à un groupe de discussion en ligne *(participation facultative et reposant sur une sélection de 5 personnes au hasard)*
  - pour au plus 2 séances, durée de 1h à 1h30 chacune

Si vous souhaitez en apprendre davantage sur cette étude, veuillez communiquer avec Samar Attieh, Doctorante à l'université McGill

Par courriel: Loiselle.Lab.ccomtl@ssss.gouv.qc.ca

Par téléphone: **514-398-8977**

Cette étude est menée par **Carmen G. Loiselle**, professeure à l'Université McGill et codirectrice (universitaire), Centre du cancer Segal

Aucune rémunération n'est offerte

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Appendix G: Example of search terms and literature search strategies

Search Topic: Cancer Team Functioning in health crisis

Keywords: Team Functioning, Team Relational Coordination, Team Effectiveness, Cancer, Oncology, Cancer Care, Health Crisis, Outbreak, Pandemic, Endemic, Epidemic

Ovid MEDLINE

Exploring & Exploding Relevant Subject Headings (MeSH) for each keyword

Team Functioning • Patient care team • Interprofessional relations • Cooperative behavior • Communication • Health personnel • Attitude of health personnel • Team functioning.mp. search as Keyword exp Health Personnel/ or exp Communication/ or exp Patient Care Team/ or exp Cooperative Behavior/ or exp "Attitude of Health Personnel"/ or team functioning.mp. or exp Interprofessional Relations/	**Team effectiveness** • Patient care team • Cooperative behavior • Group processes • Interprofessional relations • Leadership • Attitude of health personnel • Team effectiveness.mp. search as Keyword exp Leadership/ or exp Patient Care Team/ or exp Interprofessional Relations/ or exp Group Processes/ or team effectiveness.mp. or exp Primary Health Care/ or exp Cooperative Behavior/	**Team relational coordination** • Interprofessional relations • Health personnel • Cooperative behavior • Clinical competence • Communication • Attitude of health personnel • Patient care team • Primary health Care • Team relational coordination.mp search as Keyword exp Communication/ or exp Patient Care Team/ or exp Health Personnel/ or team relational coordination.mp. or exp Accountable Care Organizations/ or exp Interprofessional Relations/ or exp Primary Health Care/
Oncology • Medical oncology • Oncology nursing • Radiation oncology • Surgical oncology • Oncology.mp. search as Keyword exp Oncology Nursing/ or exp Surgical Oncology/ or exp Medical Oncology/ or exp Radiation Oncology/ or exp Psycho-Oncology/ or oncology.mp.	**Cancer care** • Medical oncology • Cancer survivors • Neoplasms exp Medical Oncology/ or cancer care.mp. or exp Cancer Survivors/ **Cancer** • neoplasms • cancer.mp cancer.mp. or exp Neoplasms/	

Pandemic pandemic.mp. or exp Pandemics/ **Endemic** exp Malaria/ or exp COVID-19/ or endemic.mp. or exp Endemic Diseases/ or exp Goiter, Endemic/ or exp Echinococcosis/ or exp Dengue/	**Outbreak** • Disease outbreaks • Outbreak.mp search as keyword exp Influenza, Human/ or epidemic.mp. or exp Epidemics/ or exp Sarcoma, Kaposi/ or exp Yellow Fever/ or exp Disease Outbreaks/	**Health Crisis** • COVID-19 • Pandemics • SARS COV 2 • Health crisis.mp search as keyword exp COVID-19/ or exp Pandemics/ or health crisis.mp. or exp SARS-CoV-2/
Team Functioning • Patient care team • Interprofessional relations • Cooperative behavior • Communication • Health personnel • Attitude of health personnel • Team functioning.mp. search as Keyword exp Health Personnel/ or exp Communication/ or exp Patient Care Team/ or exp Cooperative Behavior/ or exp "Attitude of Health Personnel"/ or team functioning.mp. or exp Interprofessional Relations/	**Team effectiveness** • Patient care team • Cooperative behavior • Group processes • Interprofessional relations • Leadership • Attitude of health personnel • Team effectiveness.mp. search as Keyword exp Leadership/ or exp Patient Care Team/ or exp Interprofessional Relations/ or exp Group Processes/ or team effectiveness.mp. or exp Primary Health Care/ or exp Cooperative Behavior/	**Team relational coordination** • Interprofessional relations • Health personnel • Cooperative behavior • Clinical competence • Communication • Attitude of health personnel • Patient care team • Primary health Care • Team relational coordination.mp search as Keyword exp Communication/ or exp Patient Care Team/ or exp Health Personnel/ or team relational coordination.mp. or exp Accountable Care Organizations/ or exp Interprofessional Relations/ or exp Primary Health Care/
Oncology • Medical oncology • Oncology nursing • Radiation oncology • Surgical oncology • Oncology.mp. search as Keyword exp Oncology Nursing/ or exp Surgical Oncology/ or exp Medical Oncology/ or exp Radiation	**Cancer care** • Medical oncology • Cancer survivors • Neoplasms exp Medical Oncology/ or cancer care.mp. or exp Cancer Survivors/ **Cancer** • neoplasms • cancer.mp cancer.mp. or exp Neoplasms/	

Oncology/ or exp Psycho-Oncology/ or oncology.mp.		
Pandemic pandemic.mp. or exp Pandemics/ **Endemic** exp Malaria/ or exp COVID-19/ or endemic.mp. or exp Endemic Diseases/ or exp Goiter, Endemic/ or exp Echinococcosis/ or exp Dengue/	**Outbreak** • Disease outbreaks • Outbreak.mp search as keyword exp Influenza, Human/ or epidemic.mp. or exp Epidemics/ or exp Sarcoma, Kaposi/ or exp Yellow Fever/ or exp Disease Outbreaks/	**Health Crisis** • COVID-19 • Pandemics • SARS COV 2 • Health crisis.mp search as keyword exp COVID-19/ or exp Pandemics/ or health crisis.mp. or exp SARS-CoV-2/

Psych info

Team Functioning exp Intervention/ or exp Cognition/ or exp Group Performance/ or exp Work Teams/ or exp Teams/ or exp Conflict/ or exp Health Personnel/ or exp Interdisciplinary Treatment Approach/ or exp Nurses/ or exp Evidence Based Practice/ or exp Hospice/ or team functioning.mp. or exp Teamwork/ or exp Group Dynamics/ or exp Decision Making/ or exp Leadership/	**Team effectiveness** exp Communication/ or exp Decision Making/ or exp Organizational Effectiveness/ or exp Organizations/ or exp Group Performance/ or exp Leadership Style/ or team effectiveness.mp. or exp Commitment/ or exp Conflict/ or exp Work Teams/ or exp Group Dynamics/ or exp Teams/ or exp Employee Attitudes/ or exp Virtual Teams/ or exp Leadership/	**Team relational coordination** exp Organizations/ or exp "Quality of Care"/ or exp Health Care Services/ or exp Work Teams/ or exp Teams/ or exp Communication/ or exp Group Performance/ or exp Job Performance/ or exp Interdisciplinary Treatment Approach/ or exp Hospitals/ or exp Leadership/ or team relational coordination.mp. or exp Collaboration/ or exp Primary Health Care/ or exp Teamwork/ or exp Health Personnel/
Oncology oncology.mp. or exp Oncology/	**Cancer care** exp Client Attitudes/ or exp "Quality of Life"/ or exp Decision Making/ or exp Coping Behavior/ or exp Health Care Services/ or exp Nurses/ or cancer care.mp. or exp Psychosocial Factors/ or exp Treatment/ or exp Oncology/ or exp Palliative Care/ or exp Neoplasms/ or exp Health Care Delivery/ or exp Communication Skills Training/ or exp Breast Neoplasms/ **Cancer** cancer.mp. or exp Neoplasms/	
Pandemic exp Pandemics/ or pandemic.mp.	**Outbreak** exp Influenza/ or exp Viral	**Health Crisis**

Endemic exp Infectious Disorders/ or exp HIV/ or exp Public Health/ or exp Caregivers/ or exp Malaria/ or endemic.m	Disorders/ or exp Public Health/ or exp COVID-19/ or exp Pandemics/ or exp Infectious Disorders/ or outbreak.mp. or exp Severe Acute Respiratory Syndrome/ or exp Epidemics/ or exp Epidemiology/ or exp Disease Outbreaks/ or exp Coronavirus/ or exp Respiratory Tract Disorders/	exp Crisis Intervention Services/ or exp Public Health/ or exp Crisis Intervention/ or exp COVID-19/ or health crisis.mp. or exp Epidemics/

Team*.ti or team*.tw; Cancer.ti. or cancer.tw. or oncology.ti. or oncology.tw.

EMBASE

Team Functioning Teamwork Leadership Organization and management Team functioning.mp search as keyword	**Team effectiveness** Teamwork Cooperation Group process Organization and management Leadership Team effectiveness.mp search as keyword	**Team relational coordination** Patient care Interpersonal communication Leadership Team relational coordination.mp search as keyword
Oncology Oncology nurse Oncology nursing Psycho-oncology Radiation oncology Surgical oncology Oncology.mp search as keyword	**Cancer care** Neoplasm Breast cancer Patient care Cancer patient Cancer care.mp search as keyword **Cancer** cancer.mp. search as keyword	
Pandemic Pandemic Pandemic influenza Pandemic.mp search as keyword Endemic Endemic disease Endemic.mp search as keyword	**Outbreak** epidemic coronavirus disease 2019 outbreak.mp search as keyword	**Health Crisis** coronavirus disease 2019 health crisis.mp search as keyword

CINAHL

Team Functioning OR Team effectiveness OR Team relational coordination Multidiciplinary care team Team Nursing Team building Teamwork +search as keywords	(MM "Multidisciplinary Care Team") OR (MM "Team Nursing") OR (MM "Team Building") OR "Team Functioning OR Team effectiveness OR Team relational coordination."
Oncology OR Cancer Cancer patients Oncology nursing Oncology care Cancer care facilities Surgical oncology Radiation oncology nursing Radiation oncoogy Oncology care units + keyword	(MM "Cancer Patients") OR (MM "Oncologic Care") OR (MM "Cancer Care Facilities") OR (MM "Oncologic Nursing") OR (MM "Oncology Care Units") OR "Oncology OR Cancer"
Pandemic OR endemic OR outbreak OR Health crisis Disease outreaks COVID-19 PANDEMIC Crisis intervention Attitude of healthcare personnel Personnel health facilities Influenza pandemic H1N1 2009 Covid-19 pandemic Multiskilled health practitioners Disease outbreaks **Expanders** - Apply equivalent subjects Search modes - Boolean/Phrase	(MM "Disease Outbreaks") OR (MM "COVID-19 Pandemic") OR (MM "Crisis Intervention") OR (MM "Attitude of Health Personnel") OR (MM "Personnel, Health Facility") OR "Pandemic OR endemic OR outbreak OR Health crisis" ((MM "Disease Outbreaks") OR (MM "COVID-19 Pandemic") OR (MM "Crisis Intervention") OR (MM "Attitude of Health Personnel") OR (MM "Personnel, Health Facility") OR "Pandemic OR endemic OR outbreak OR Health crisis") AND (S1 AND S2 AND S3)

Google scholar

Search: 2000-2022
"cancer" and "team functioning" and "pandemic"
"cancer" and "team effectiveness" and "pandemic"
"cancer" and "team relational coordination" and "pandemic"

Appendix H: Consent forms EN/FR

Centre intégré universitaire de santé et de services sociaux de l'Ouest-de-l'Île-de-Montréal
Québec

CANCER CARE
TEAM FUNCTIONING

INFORMATION AND CONSENT FORM
(Patients)

STUDY TITLE: Cancer care team functioning during COVID-19 and relationships with patient satisfaction and health-related outcomes: A hybrid multimethod approach

PRINCIPAL INVESTIGATOR: Carmen G. Loiselle, R.N., Ph.D., F.C.A.H.S, Segal Cancer Centre (CIUSSS Centre-Ouest-de-l'Île-de-Montréal) and Department of Oncology and Ingram School of Nursing, Faculty of Medicine, McGill University

DOCTORAL CANDIDATE: Samar Attieh, M.Sc., M.PH., Doctoral candidate in Experimental Medicine, Faculty of Medicine, McGill University

SOURCE OF FUNDING: Christine and Herschel Victor/Hope & Cope Chair in Psychosocial Oncology

INTRODUCTION
You are invited to participate in an online study. Please take the time to carefully read, understand, and think about the information that has been explained and given to you in this form. If you choose to take part in this study, we will ask you to electronically click on the “next” icon at the end of this consent form, indicating that you agree to participate.

This consent form may contain words or information that you do not fully understand. If this is the case, we encourage you to ask the principal investigator responsible for this study, or a member of the research team, any questions that you may have. Their contact information is found at the end of this consent form. You may ask them to explain all words and information that are unclear, as they have the obligation to answer in such a way that you can understand the information presented to you.

NATURE AND OBJECTIVES OF THE STUDY
In this online study, we are interested in knowing more about people’s perceptions of how cancer care teams work together and how this may be related to the patient experience during COVID-19. Healthcare professionals, patients, caregivers (e.g., family members, friends) and volunteers will be invited to take part in the study. To be eligible, you must have received a

diagnosis of breast or gynecologic cancer (at any stage) and have started or completed treatment within the past year. You must also be a patient seen at the Jewish General Hospital in the breast or gynecologic clinics. To be able to complete study procedures, you must have an electronic device and internet access. 115 women with breast or gynecologic cancer will be recruited to participate, 10 caregivers caring for someone diagnosed with breast or gynecologic cancer, 5 volunteers at the breast or gynecologic departments as well as 25 healthcare professionals involved in the care of patients diagnosed with breast or gynecologic cancer.

STUDY PROCEDURES
You will be asked to complete electronic questionnaires and participate in two online discussion sessions. The study involves 4 main phases spread over 12 months. You will be asked to:

- **Phase 1:** Complete 25-minute online questionnaires, using an electronic device. We will ask you about your background (e.g., age, occupation), your medical history (e.g., cancer diagnosis), your view on how cancer team functions and care experience during COVID-19 (e.g., your satisfaction).
- **Phase 2:** Participate in a 60-minute group discussion with other women with cancer to discuss factors linked to cancer care team performance. This group discussion will be done online via Zoom Pro or Teams. The discussion will be video recorded. You can use a nickname instead of your real name while logged in. If your wish, you also can choose to close your camera, and only use the chat feature instead of speaking. At the end of this consent form, you may indicate if you are interested in participating in this discussion, but only 5 women will be randomly picked by a software program to take part.

  Phase 3: Read a report on early results that will be sent to you by email and later join a 60 to 90 -minute online discussion with other patients, caregivers, volunteers and healthcare professionals. This group discussion will be done online via Zoom Pro or Teams. The discussion will be video recorded. During the discussion, it is possible that you may know other participants and they may know you, as well, such a doctor, a caregiver or a volunteer. If you do not wish to reveal your identity, you are free to a nickname instead of your real name while logged in. Please choose a nickname that starts with the letter "P" so that the research coordinator knows you are a patient. You can also choose to close your camera, and only use the chat feature instead of speaking. In addition, if you feel uncomfortable sharing specific information during the session, you may contact the research team privately anytime during the session and afterwards to share this information. The facilitator will share the contact information of the research team 3 times during the meeting (As well you can find our contact information below). You may indicate if you are interested to participate in this session at the end of this consent form but only 5 patients will be randomly picked by a software program to take part. From the 5 patients participating, one will be randomly picked and contacted to check if the results in the report accurately represent this participant's opinion.
- **Phase 4:** Complete the final 20-minute online questionnaires on how you view the team functioning and care experience (e.g., your satisfaction).

RISKS

No known risks are associated with the study. However, for some participants, answering questions or discussing cancer-related topic may cause negative emotions, such as distress or anxiety, or to be fatigued or uncomfortable. If you were to experience such emotions, fatigue or feel uncomfortable, we will refer you to your treatment team, with your permission. They can provide you with a referral to an appropriate resource. In addition, we can provide you with a list of available resources. At the end of each questionnaire, we will also list resources that you may contact, directly.

Note that if you report high distress (7 or higher) when you complete one of the questionnaires, the research coordinator of this study will receive an automatic email notification. Within a maximum of 24 hours, your nurse pivot will be notified, and she will contact you by phone to discuss the issues and take appropriate action (e.g., making a referral, adjusting treatment recommendations, etc.).

For the online discussions, the facilitator will inform participants at the beginning, halfway and at the end of the session, that if someone appears to experience negative emotions, is fatigued or uncomfortable, a research team member will contact them using the private chat feature and will refer them to an appropriate resource with their permission. The research coordinator will share a list of resources and notify the nurse pivot within 24 hrs. The research team contact information will be displayed on screen and on the chat forum for participants who wish to contact us.

E-mail: **Loiselle.Lab.ccomtl@ssss.gouv.qc.ca**
Phone: **514-398-8977**

POTENTIAL BENEFITS RELATED TO RESEARCH PARTICIPATION

There are no direct benefits of the research component of this study, but by participating, you will help us better understand what constitutes quality cancer care team performance, especially during the pandemic, as well as provide important information on areas to improve in team functioning.

COMPENSATION

You will not receive compensation for taking part in this study.

CONFIDENTIALITY

For the purpose of this study, we will collect personal information from you, which includes information that can identify you. To protect your privacy, all information collected will remain confidential to the extent permitted by law. The Principal Investigator is responsible for preserving the confidentiality of the information collected.

- **Personal coded information:**

To keep your information private, you will be identified only by an assigned arbitrary ID number.

- **Storage, Retention and Destruction of Documents:**

All information obtained in this study will be stored in Qualtrics, a secure web-based electronic system supported by McGill University. Qualtrics is licensed through McGill University's Ingram School of Nursing and is used by international governments, health care organizations, and academic institutions (e.g., McGill University, Yale University, Microsoft). Qualtrics security and privacy statements:

https://www.qualtrics.com/platform/security/
https://www.qualtrics.com/security-statement/
https://www.qualtrics.com/privacy-statement/

The code key, contact forms and the electronic consent forms will be each automatically recorded and stored in separate databases on Qualtrics, and accessed only by the principal investigator, research coordinator and research manager with unique passwords.

The data collected (i.e., answers to the questionnaires), the audio recordings as well as their transcriptions will also be stored separately in password protected folders on the institutional McGill OneDrive server. The code-key will be also stored on McGill OneDrive and protected with a password. The video recordings will not be stored, they will be deleted immediately after transcription.

After 10 years, all study electronic and paper data will be permanently destroyed (deleted). The researcher in charge of the study is responsible for destroying the data.

- **Online discussions:**

In online group sessions, we will ask all participants to keep the information shared private and confidential. However, we cannot guarantee that this request will be honored.

- **Right to access information collected:**

You have the right to access, review, revise or delete information collected from you during the study, however, you cannot delete or revise information once data analysis has begun. We are unable to delete your participation from the video recordings, however, you can ask to delete any information you have provided.

- **Auditing/Monitoring:**

For monitoring, control, protection and security purposes, your study file could be checked by a person authorized by the Research Ethics Committee of the CIUSSS du Centre-Ouest-de-l'Île de Montréal. This person is bound by a confidentiality agreement.

VOLUNTEER PARTICIPATION AND THE RIGHT TO WITHDRAW

You are free to refuse to participate in this study. You may withdraw from this study at any time without having to give a reason and without any consequence to you now or in the future. Whether you decide to participate or not, or if you withdraw at any time from this study, your decision will not affect the quality of care and services that you have the right to receive in any way.

FUTURE USE, COMMUNCIATION, AND PUBLICATION OF RESEARCH RESULTS

Results from the electronic questionnaires will be presented as grouped data. This means that no individual results will be reported. Direct quotes from the online sessions might be cited in presentations and scientific papers, but we will do our best to ensure that your privacy is protected. We will change or disguise any unique or sensitive information. Results will be presented in publications, conferences, and discussions with clinicians.

RESOURCE PERSONS

If you have any questions about the study, you can contact the researcher in charge.

Principal Investigator: Dr. Carmen G. Loiselle, Professor, McGill University, Department of Oncology and Ingram School of Nursing, Segal Cancer Centre and Lady Davis Institute for Medical Research
E-mail: **carmen.g.loiselle@mcgill.ca**
Research phone: **514-398-8977**

You can also contact Samar Attieh, doctoral candidate, and research coordinator of this study.
E-mail: **Loiselle.Lab.ccomtl@ssss.gouv.qc.ca**
Phone: **514-398-8977**

For all questions concerning your rights during your participation in this study, or if you have any complaints or comments regarding your experience in taking part in this study, you can contact the Local Commissioner of Complaints and Quality of Service of the CIUSSS Centre-Ouest-de-l’Île-de-Montréal or the ombudsman of the institution at (514) 340-8222, ex. 24222.

Centre intégré
universitaire de santé
et de services sociaux
de l'Ouest-de-
l'Île-de-Montréal
Québec

CANCER CARE
TEAM FUNCTIONING

FORMULAIRE DE RENSEIGNEMENTS ET DE CONSENTEMENT

(Patientes)

TITRE DE L'ÉTUDE : Les rapports du fonctionnement de l'équipe de soins en oncologie durant la COVID-19 avec la satisfaction des patientes et les résultats liés à la santé : une approche hybride multiméthodes

CHERCHEUSE PRINCIPALE : Carmen G. Loiselle, infirmière autorisée, PhD, FACSI, Centre du cancer Segal (CIUSSS Centre-Ouest-de-l'Île-de-Montréal) et Département d'oncologie et École des sciences infirmières Ingram, Faculté de médecine, Université McGill

DOCTORANTE : Samar Attieh, MSc, MSP, doctorante à la Division de médecine expérimentale, Université McGill

SOURCE DE FINANCEMENT : Chaire en oncologie psychosociale Christine et Herschel Victor/L'espoir, c'est la vie

INTRODUCTION

Nous vous invitons à participer à une étude en ligne. Veuillez prendre le temps de lire attentivement les renseignements donnés dans le présent formulaire et vous assurer de bien les comprendre. Veuillez cliquer sur l'icône « Suivant » à la fin de ce formulaire de consentement pour nous indiquer que vous acceptez de participer à cette étude.

Ce formulaire de consentement peut contenir des termes ou de l'information qui ne sont pas totalement clairs pour vous. Si c'est le cas, nous vous encourageons à poser vos questions à la chercheuse principale responsable de cette étude ou à un membre de l'équipe de recherche. Vous trouverez leurs coordonnées à la fin de ce formulaire de consentement. Vous pouvez leur demander de vous expliquer tous les termes ou informations qui ne sont pas clairs; elles ont l'obligation de vous aider à bien comprendre l'information qui vous est présentée.

NATURE ET OBJECTIFS DE L'ÉTUDE

Dans cette étude en ligne, nous souhaitons mieux connaître la perception des gens de la qualité du travail des membres de l'équipe de soins en oncologie et le lien que cela peut avoir avec l'expérience des patientes durant la COVID-19. Des prestataires de soins de santé, des patientes et des aidants naturels (p. ex., membres de la famille, amis) et des bénévoles seront invités à prendre part à cette étude. Pour être admissible, vous devez avoir reçu un diagnostic de cancer du sein ou d'un cancer gynécologique (de n'importe quel stade) et avoir commencé ou terminé un traitement au cours de la dernière année. Vous devez également être une patiente qui est suivie à la clinique du cancer du sein ou celle du cancer gynécologique de l'Hôpital général juif de Montréal. Pour pouvoir suivre la procédure de l'étude, vous devez également avoir un appareil électronique et un accès Internet. Pour cette étude, nous recruterons 115 femmes atteintes d'un cancer du sein ou d'un cancer gynécologique, 10 aidants naturels d'une personne ayant reçu un diagnostic de cancer du sein ou de cancer gynécologique, 5 bénévoles aux services des soins relatifs au cancer du sein ou au cancer gynécologique, ainsi que 25 prestataires de soins de santé à des patientes ayant reçu un diagnostic de cancer du sein ou de cancer gynécologique.

PROCÉDURE DE L'ÉTUDE

Il vous sera demandé de remplir des questionnaires électroniques et de participer à deux séances de discussion en ligne. L'étude comporte quatre phases principales échelonnées sur douze mois. Voici ce qu'il vous sera demandé :

- **Phase 1 :** Remplir des questionnaires en ligne d'une durée de 25 minutes au moyen d'un appareil électronique. Nous vous poserons des questions sur votre situation (p. ex., âge, occupation), vos antécédents médicaux (p. ex., diagnostic de cancer), votre perception du fonctionnement de l'équipe de soins en oncologie et votre expérience des soins durant la COVID-19 (p. ex., votre satisfaction).
- **Phase 2 :** Participer à une discussion de groupe d'une durée de 60 minutes avec d'autres femmes atteintes d'un cancer pour discuter des facteurs liés au rendement de l'équipe de soins en oncologie. Cette discussion de groupe se fera en ligne au moyen de Zoom Pro ou Teams. La discussion sera enregistrée sur vidéo. Vous pouvez utiliser un surnom plutôt que votre vrai nom lorsque vous vous connectez. Si vous voulez, vous pouvez aussi choisir d'éteindre votre caméra, et utiliser la fonction de clavardage plutôt que de parler. À la fin de ce formulaire de consentement, vous pouvez indiquer si vous souhaitez participer à cette discussion. Cependant, seulement cinq femmes seront choisies au hasard par un logiciel pour prendre part à la discussion.
- **Phase 3 :** Lire un rapport sur les résultats préliminaires qui vous sera envoyé par courriel, puis participer à une discussion en ligne d'une durée de 60 à 90 minutes avec les autres patientes, aidants naturels, bénévoles et prestataires de soins. Cette discussion de groupe se fera en ligne au moyen de Zoom Pro ou Teams. La discussion sera enregistrée sur vidéo. Il se peut que vous connaissiez d'autres personnes participant à cette discussion et qu'elles vous connaissent aussi, par exemple un médecin, un aidant naturel ou une bénévole. Si vous préférez ne pas révéler votre identité, vous être libre d'utiliser un surnom au lieu de votre vrai nom lorsque vous vous connectez. Veuillez choisir un surnom qui commence par la lettre P afin que la coordonnatrice de la recherche sache que vous êtes une patiente. Vous pouvez aussi choisir d'éteindre votre caméra, et utiliser seulement la fonction de clavardage plutôt que de parler. De plus, si vous vous sentez mal à l'aise de partager certains renseignements pendant la séance, vous pouvez communiquer en privé avec l'équipe de recherche à tout moment pendant et après la séance pour lui communiquer ces

renseignements. L'animateur ou animatrice communiquera les coordonnées de l'équipe de recherche à trois reprises au cours de la rencontre. (Vous trouverez également nos coordonnées ci-dessous). Vous pouvez indiquer si vous souhaitez participer à cette séance à la fin du formulaire de consentement, mais seulement cinq patientes seront choisies au hasard par un logiciel pour y participer. Nous communiquerons avec une de ces cinq patientes, qui sera choisie par hasard, pour vérifier si les résultats du rapport représentent adéquatement son opinion.

- **Phase 4 :** Remplir les derniers questionnaires en ligne d'une durée de 20 minutes sur votre opinion à l'égard du fonctionnement de l'équipe et votre expérience des soins (p. ex., votre satisfaction).

RISQUES

Il n'y a aucun risque connu associé à cette étude. Cependant, répondre à des questions sur des sujets liés au cancer ou en discuter peut provoquer chez certains participants ou participantes des émotions négatives, telles que de la détresse ou de l'anxiété, ou causer de la fatigue ou un inconfort.

Si jamais vous ressentez de telles émotions, de la fatigue ou un inconfort, avec votre permission, nous vous dirigerons vers votre équipe de traitement, qui pourra vous orienter vers une ressource appropriée. Nous pouvons également vous fournir une liste des ressources disponibles. À la fin de chaque questionnaire, nous indiquerons également une liste des ressources avec lesquelles vous pourrez communiquer directement.

Notez que si vous signalez une détresse élevée (7 ou plus) lorsque vous remplissez l'un des questionnaires, la coordonnatrice de la recherche pour cette étude recevra un avis automatique par courriel. Dans un délai maximum de 24 heures, votre infirmière-pivot sera avisée et elle vous appellera pour discuter des problèmes et prendre les mesures appropriées (p. ex., vous orienter vers une ressource, modifier les recommandations de traitement, etc.).

Pour les discussions en ligne, l'animateur ou animatrice avisera les participants et les participantes au début, au milieu et à la fin de la séance que si une personne semble vivre des émotions négatives, ou est fatiguée ou inconfortable, un membre de l'équipe de recherche communiquera avec elle à l'aide de la fonction clavardage privé, et l'orientera, avec sa permission, vers une ressource appropriée. La coordonnatrice de la recherche communiquera une liste de ressources et avisera l'infirmière-pivot dans les 24 heures. Les coordonnées de l'équipe de recherche seront affichées à l'écran et dans le forum de discussion pour les participants et les participantes qui souhaitent communiquer avec nous.

Courriel : **Loiselle.Lab.ccomtl@ssss.gouv.qc.ca**
Téléphone : **514-398-8977**

AVANTAGES POTENTIELS DE LA PARTICIPATION À L'ÉTUDE

Le volet recherche de cette étude n'apporte aucun avantage direct, mais en y participant, vous nous aiderez à mieux comprendre ce qui constitue un rendement de qualité pour une équipe de soins en oncologie, en particulier durant la pandémie, et vous nous fournirez des informations importantes sur des aspects à améliorer dans le fonctionnement de l'équipe.

RÉMUNÉRATION

Vous ne recevrez aucune rémunération pour votre participation à cette étude.

CONFIDENTIALITÉ

Pour les besoins de cette étude, nous recueillerons des renseignements personnels sur vous, y compris des renseignements permettant de vous identifier. Afin de protéger votre vie privée, tous les renseignements recueillis resteront confidentiels dans la mesure où la loi le permet. La chercheuse principale est responsable de la préservation de la confidentialité des renseignements recueillis.

- **Renseignements personnels codés:**

Afin de préserver la confidentialité de vos renseignements, vous serez identifié uniquement par un numéro d'identification qui vous sera attribué au hasard.

- **Stockage, conservation et destruction des documents :**

Tous les renseignements obtenus dans le cadre de cette étude seront stockés dans Qualtrics, un système électronique sécurisé sur le Web administré par l'Université McGill. L'École des sciences infirmières Ingram détient la licence d'utilisation de Qualtrics, et ce système est utilisé par des gouvernements internationaux, des organisations de soins de santé et des établissements universitaires (dont l'Université McGill, l'Université Yale, Microsoft). Voici les liens aux déclarations (en anglais) relatives à la sécurité et à la confidentialité de Qualtrics :

https://www.qualtrics.com/platform/security/
https://www.qualtrics.com/security-statement/
https://www.qualtrics.com/privacy-statement/

La clé de codage, les formulaires de contact et les formulaires de consentement électroniques seront chacun automatiquement enregistrés et stockés dans des bases de données distinctes dans Qualtrics, et accessibles uniquement par la chercheuse principale et la coordonnatrice et gestionnaire de la recherche avec des mots de passe uniques.

Les données recueillies (c.-à-d. les réponses aux questionnaires), les enregistrements audios ainsi que leurs transcriptions seront également stockés séparément dans des dossiers protégés par un mot de passe sur le serveur OneDrive de l'Université McGill. La clé de codage sera également stockée sur le serveur OneDrive de l'Université McGill et protégée par un mot de passe. Les enregistrements vidéo ne seront pas stockés; ils seront effacés immédiatement après leur transcription.

Après dix ans, toutes les données électroniques et les données de l'étude sur papier seront détruites (supprimées) définitivement. La chercheuse principale de l'étude est responsable de détruire les données.

- **Discussions en ligne:**

Lors des séances de groupe en ligne, nous demanderons à tous les participants et participantes de garder les renseignements partagés confidentiels. Nous ne pouvons toutefois pas garantir que cette demande sera honorée. Nous modifierons ou dissimulerons toute information sensible ou unique.

- **Droit d'accès aux renseignements recueillis :**

Vous avez le droit d'accéder aux renseignements que vous nous avez fournis pendant l'étude, de même que de les examiner, de les réviser ou de les supprimer, mais vous ne pouvez pas les supprimer ou les réviser une fois que l'analyse des données a commencé. Nous ne pouvons pas supprimer votre participation aux enregistrements vidéo, cependant, vous pouvez demander de supprimer toute information que vous avez fournie.

- **Vérification et surveillance:**

À des fins de surveillance, de contrôle, de protection et de sécurité, votre dossier d'étude pourrait être vérifié par une personne autorisée par le Bureau d'examen de la recherche du CIUSSS du Centre-Ouest-de-l'Île de Montréal. Cette personne est liée par une entente de confidentialité.

PARTICIPATION VOLONTAIRE ET LE DROIT DE RETRAIT

Vous êtes libre de refuser de participer à cette étude. Vous pouvez décider de vous retirer de cette étude en tout temps sans avoir à donner de raison et sans conséquence pour vous, maintenant ou dans l'avenir. Que vous décidiez de participer à l'étude ou pas, ou que vous vous retiriez de cette étude à n'importe quel moment, votre décision n'aura pas d'effet sur la qualité des soins et des services que vous êtes en droit de recevoir.

UTILISATION, COMMUNICATION ET PUBLICATION FUTURES DES RÉSULTATS DE RECHERCHE

Les résultats des questionnaires électroniques seront présentés sous forme de données groupées. Cela signifie qu'aucun résultat individuel ne sera communiqué. Des citations directes des séances en ligne pourront être insérées dans des présentations et des articles scientifiques, mais nous ferons de notre mieux pour garantir la protection de votre vie privée. Nous modifierons ou dissimulerons toute information unique ou sensible. Les résultats seront présentés dans des publications, des conférences et des discussions avec des cliniciens et des cliniciennes.

PERSONNES-RESSOURCES

Si vous avez des questions, vous pouvez communiquer avec la chercheuse responsable de l'étude.

Chercheuse principale : Carmen G. Loiselle, professeure, Université McGill, Département d'oncologie et École des sciences infirmières Ingram, Centre du cancer Segal et l'Institut Lady Davis de recherches médicales
Courriel : **carmen.g.loiselle@mcgill.ca**
Téléphone (recherche) : **514-398-8977**

Vous pouvez également communiquer avec Samar Attieh, doctorante et coordonnatrice de la recherche pour cette étude.
Courriel : **Loiselle.Lab.ccomtl@ssss.gouv.qc.ca**
Téléphone : **514-398-8977**

Si vous avez des questions concernant vos droits pendant votre participation à cette étude, ou si vous avez des plaintes ou des commentaires concernant votre expérience de participation à cette étude, vous pouvez communiquer avec la Commissaire locale aux plaintes et à la qualité des services du CIUSSS Centre-Ouest-de-l'Île-de-Montréal ou avec l'ombudsman de cet établissement au (514) 340-8222, poste 24222.

INFORMATION AND CONSENT FORM

(Healthcare professionals who are members of the breast and/or gynecologic teams)

STUDY TITLE: Cancer care team functioning during COVID-19 and relationships with patient satisfaction and health-related outcomes: A hybrid multimethod approach

PRINCIPAL INVESTIGATOR: Carmen G. Loiselle, R.N., Ph.D., F.C.A.H.S, Segal Cancer Centre (CIUSSS Centre-Ouest-de-l'Île-de-Montréal) and Department of Oncology and Ingram School of Nursing, Faculty of Medicine, McGill University

DOCTORAL CANDIDATE: Samar Attieh, M.Sc., M.P.H., Doctoral Candidate in Experimental Medicine, Faculty of Medicine, McGill University

SOURCE OF FUNDING: Christine and Herschel Victor/Hope and Cope Chair in Psychosocial Oncology

INTRODUCTION

You are invited to participate in an online study. Please take the time to carefully read, understand, and think about the information that has been explained and given to you in this form. If you choose to take part in this study, we will ask you to electronically click on the "next" icon at the end of this consent form indicating that you agree to participate.

This consent form may contain words or information that you do not fully understand. If this is the case, we encourage you to ask the principal investigator responsible for this study, or a member of the research team, any questions that you may have. Their contact information is found at the end of this consent form. You may ask them to explain all words and information that are unclear, as they have the obligation to answer in such a way that you can understand the information presented to you.

NATURE AND OBJECTIVES OF THE STUDY

In this online study, we are interested in knowing more about people's perceptions of how cancer care teams work together and how this may be related to the patient experience during COVID-19. Healthcare professionals, patients, caregivers (e.g., family members, friends) and volunteers will be invited to take part in the study. To be eligible to participate, you must have been working with women with breast or gynecologic cancer at the Jewish General Hospital for at least 3 months and have an electronic device and internet access. Twenty-five healthcare professionals will be recruited for the study, in addition to 115 women with breast or gynecologic cancer and 15 caregivers/volunteers caring for patients diagnosed with breast or gynecologic cancer.

STUDY PROCEDURES

You will be asked to complete electronic questionnaires and participate in two online discussion sessions. The study involves 4 main phases spread over 12 months. You will be asked to:

- **Phase 1:** Complete a 25-minute online questionnaires, using an electronic device. We will ask you about your background (e.g., age, occupation), your work history (e.g., for how long you have been working) and your view on how cancer team functions during COVID-19.
- **Phase 2:** Participate in a 60-minute group discussion with other healthcare professionals to discuss factors linked to cancer care team performance. This group discussion will be done online via Zoom Pro or Teams. The discussion will be video recorded. During the discussion, it is possible that you may know other participants and they may know you, as well, such as a healthcare professional working in your team. If you do not wish to reveal your identity, you are free to use a nickname instead of your real name while logged in. If you wish, you also can choose to close your camera, and only use the chat feature instead of speaking. At the end of this consent form, you may indicate if you are interested in participating in this discussion, but only but only 5 cancer specialists (e.g., surgeons, radiation oncologists, medical oncologist), 5 nurses and 5 allied healthcare professionals (e.g., psychologist, social worker, physiotherapist) will be randomly picked by a software program to take part in separate group discussions.

  Phase 3: Read a report on early results that will be sent to you by email and later join a 60 to 90 -minute online discussion with other patients, caregivers, volunteers, and healthcare professionals. This group discussion will be done online via Zoom Pro or Teams. The discussion will be video recorded. During the discussion, it is possible that you may know other participants and they may know you, as well, such a doctor, a patient, a caregiver, or a volunteer. If you do not wish to reveal your identity, you are free to use a nickname instead of your real name while logged in. Please choose a nickname that starts with the letter “H” so that the research coordinator knows you are a healthcare professional. You can also choose to close your camera, and only use the chat feature instead of speaking. In addition, if you feel uncomfortable sharing specific information during the session, you may contact the research team privately anytime during the session and afterwards to share this information. The facilitator will share the contact information of the research team 3 times during the meeting (As well you can find our contact information below). You may indicate if you are interested to participate in this session at the end of this consent form but only 5 cancer specialists, 5 nurses and 5 allied healthcare professionals will be randomly picked by a software program to take part. From each group, only one will be randomly picked and contacted to check if the results in the report accurately represent this participant’s opinion.

- **Phase 4:** Complete the final 20-minute online study questionnaires on your view on how the team functions.

RISKS

No known risks are associated with the study.

POTENTIAL BENEFITS RELATED TO RESEARCH PARTICIPATION

You will not receive any personal benefit by participating in this study. However, the information gathered during this study may contribute to shared understandings on what constitute quality cancer care team performance especially during the pandemic and may lead to improvement in your team functioning.

COMPENSATION

You will not receive any form of compensation for your participation in this study.

CONFIDENTIALITY

For the purpose of this study, we will collect personal information from you, which includes information that can identify you. To protect your privacy, all information collected will remain confidential to the extent permitted by law. The Principal Investigator is responsible for preserving the confidentiality of the information collected.

- **Personal coded information:**

To keep your information private, you will be identified only by an assigned arbitrary ID number.

- **Storage, Retention and Destruction of Documents:**

All information obtained in this study will each be stored in Qualtrics, a secure web-based electronic system supported by McGill University. Qualtrics is licensed through McGill University's Ingram School of Nursing and is used by international governments, health care organizations, and academic institutions (e.g., McGill University, Yale University, Microsoft). Qualtrics security and privacy statements:

https://www.qualtrics.com/platform/security/
https://www.qualtrics.com/security-statement/
https://www.qualtrics.com/privacy-statement/

The code key, contact forms and the electronic consent forms will be each automatically recorded and stored in separate databases on Qualtrics, and accessed only by the Principal investigator, research coordinator and research manager, with unique passwords.

The data collected (i.e., answers to the questionnaires), the audio recordings as well as their transcriptions will also be stored separately in password protected folders on the institutional McGill OneDrive server. The code key will also be stored on a separate password protected folder on McGill drive. The video recordings will not be stored, they will be deleted immediately after transcription.

After 10 years, all study electronic and paper data will be permanently destroyed (deleted). The researcher in charge of the study is responsible for destroying the data.

- **Online discussions:**

In online group sessions, we will ask all participants to keep the information shared private and confidential. However, we cannot guarantee that this request will be honored. We will change or disguise any sensitive or unique information.

- **Right to access information collected:**

You have the right to access, review, revise or delete information collected from you during the study, however, you cannot delete or revise information once data analysis has begun. We are unable to delete your participation from the video recordings, however, you can ask to delete any information you have provided.

- **Auditing/Monitoring:**

For monitoring, control, protection and security purposes, your study file could be checked by a person authorized by the Research Ethics Committee of the CIUSSS du Centre-Ouest-de-l'Île de Montréal. This person is bound by a confidentiality agreement.

VOLUNTEER PARTICIPATION AND THE RIGHT TO WITHDRAW

You are free to refuse to participate in this study. You may withdraw from this study at any time without having to give a reason and without any consequence to you now or in the future. Whether you decide to participate or not, or if you withdraw at any time from this study, your decision will not affect your work in any way.

FUTURE USE, COMMUNICATION, AND PUBLICATION OF RESEARCH RESULTS

Results from the electronic questionnaires will be presented as grouped data. This means that no individual results will be reported. Direct quotes from the online sessions might be cited in presentations and scientific papers, but we will do our best to ensure that your privacy is protected. We will change or disguise any unique or sensitive information. Results will be presented in publications, conferences, and discussions with clinicians.

RESOURCE PERSONS

If you have any questions about the study, you can contact the researcher in charge.

Principal Investigator: Dr. Carmen G. Loiselle, Professor, McGill University, Department of Oncology and Ingram School of Nursing, Segal Cancer Centre and Lady Davis Institute for Medical Research
E-mail: **carmen.g.loiselle@mcgill.ca**
Research phone: **514-398-8977**

You can also contact Samar Attieh, doctoral candidate and research coordinator of this study.

E-mail: **Loiselle.Lab.ccomtl@ssss.gouv.qc.ca**
Phone: **514-398-8977**

For all questions concerning your rights during your participation in this study, or if you have any complaints or comments regarding your experience in taking part in this study, you can contact the Local Commissioner of Complaints and Quality of Service of the CIUSSS Centre-Ouest-de-l'Île-de-Montréal or the ombudsman of the institution at (514) 340-8222, ex. 24222.

Centre intégré
universitaire de santé
et de services sociaux
de l'Ouest-de-
l'Île-de-Montréal
Québec

CANCER CARE
TEAM FUNCTIONING

FORMULAIRE DE RENSEIGNEMENTS ET DE CONSENTEMENT

(Prestataires de soins de santé qui sont membres de la clinique de cancer de seins ou cancer gynécologique)

TITRE DE L'ÉTUDE : Les rapports du fonctionnement de l'équipe de soins en oncologie avec la satisfaction des patientes et les résultats liés à la santé : une approche hybride multiméthodes

CHERCHEUSE PRINCIPALE : Carmen G. Loiselle, infirmière autorisée, PhD, FACSI, Centre du cancer Segal (CIUSSS Centre-Ouest-de-l'Île-de-Montréal) et Département d'oncologie et École des sciences infirmières Ingram, Faculté de médecine, Université McGill

DOCTORANTE : Samar Attieh, MSc, MSP, doctorante à la Division de médecine expérimentale, Université McGill

SOURCE DE FINANCEMENT : Chaire en oncologie psychosociale Christine et Herschel Victor/L'espoir, c'est la vie

INTRODUCTION

Nous vous invitons à participer à une étude en ligne. Veuillez prendre le temps de lire attentivement les renseignements donnés dans le présent formulaire et vous assurer de bien les comprendre. Veuillez cliquer sur l'icône « Suivant » à la fin de ce formulaire de consentement pour nous indiquer que vous acceptez de participer à cette étude.

Ce formulaire de consentement peut contenir des termes ou de l'information qui ne sont pas totalement clairs pour vous. Si c'est le cas, nous vous encourageons à poser vos questions à la chercheuse principale responsable de cette étude ou à un membre de l'équipe de recherche. Vous trouverez leurs coordonnées à la fin de ce formulaire de consentement. Vous pouvez leur demander de vous expliquer tous les termes ou informations qui ne sont pas clairs; elles ont l'obligation de vous aider à bien comprendre l'information qui vous est présentée.

NATURE ET OBJECTIFS DE L'ÉTUDE

Dans cette étude en ligne, nous souhaitons mieux connaître la perception des gens de la qualité du travail des membres de l'équipe de soins en oncologie et le lien que cela peut avoir avec l'expérience des patientes durant la COVID-19. Des prestataires de soins de santé, des patientes et des aidants naturels (p. ex., membres de la famille, amis) et des bénévoles seront invités à prendre part à cette étude. Pour être admissible à participer, vous devez avoir travaillé avec des femmes atteintes d’un cancer du sein ou d’un cancer gynécologique à l’Hôpital général juif pendant au moins trois mois et avoir un appareil électronique et un accès internet. Pour cette étude, nous recruterons 115 femmes atteintes d’un cancer du sein ou d’un cancer gynécologique, 10 aidants naturels d’une personne ayant reçu un diagnostic de cancer du sein ou de cancer gynécologique, 5 bénévoles aux services des soins relatifs au cancer du sein ou au cancer gynécologique, ainsi que 25 prestataires de soins de santé à des patientes ayant reçu un diagnostic de cancer du sein ou de cancer gynécologique.

PROCÉDURE DE L’ÉTUDE

Il vous sera demandé de remplir des questionnaires électroniques et de participer à deux séances de discussion en ligne. L’étude comporte quatre phases principales échelonnées sur douze mois. Voici ce qu’il vous sera demandé :

- **Phase 1 :** Remplir des questionnaires en ligne d’une durée de 25 minutes au moyen d’un appareil électronique. Nous vous poserons des questions sur votre situation (p. ex., âge, occupation), vos antécédents professionnels (p. ex., depuis combien de temps vous travaillez) et votre perception du fonctionnement de l’équipe de soins en oncologie durant la COVID-19.
- **Phase 2 :** Participer à une discussion de groupe d’une durée de 60 minutes avec d’autres prestataires de soins de santé pour discuter des facteurs liés au rendement de l’équipe de soins en oncologie. Cette discussion de groupe se fera en ligne au moyen de Zoom Pro ou Teams. La discussion sera enregistrée sur vidéo. Vous pouvez utiliser un surnom plutôt que votre vrai nom lorsque vous vous connectez. Si vous voulez, vous pouvez aussi choisir d’éteindre votre caméra, et utiliser la fonction de clavardage plutôt que de parler. À la fin de ce formulaire de consentement, vous pouvez indiquer si vous souhaitez participer à cette discussion de groupe. Cependant, seulement cinq spécialistes du cancer (p. ex., chirurgiens et chirurgiennes, radio-oncologues, oncologues médicaux), cinq infirmiers et infirmières et cinq prestataires de soins paramédicaux (p. ex., psychologues, travailleuses et travailleurs sociaux, physiothérapeutes) seront choisis au hasard par un logiciel pour prendre part à des discussions de groupe distinctes.
- **Phase 3 :** Lire un rapport sur les résultats préliminaires qui vous sera envoyé par courriel, puis participer à une discussion en ligne d’une durée de 60 à 90 minutes avec les autres patientes, aidants naturels, bénévoles et prestataires de soins. Cette discussion de groupe se fera en ligne au moyen de Zoom Pro ou Teams. La discussion sera enregistrée sur vidéo. Il se peut que vous connaissiez d’autres personnes participant à cette discussion et qu’elles vous connaissent aussi, par exemple un médecin, un aidant naturel ou une bénévole. Si vous préférez ne pas révéler votre identité, vous être libre d’utiliser un surnom au lieu de votre vrai nom lorsque vous vous connectez. Veuillez choisir un surnom qui commence par la lettre H afin que la coordonnatrice de la recherche sache que vous êtes un prestataire de soins. Vous pouvez aussi choisir d’éteindre votre caméra, et utiliser seulement la fonction de clavardage plutôt que de parler. De plus, si vous vous sentez mal à l’aise de partager certains renseignements pendant la séance, vous pouvez communiquer en privé avec

l’équipe de recherche à tout moment pendant et après la séance pour lui communiquer ces renseignements. L’animateur ou animatrice communiquera les coordonnées de l’équipe de recherche à trois reprises au cours de la rencontre. (Vous trouverez également nos coordonnées ci-dessous). Vous pouvez indiquer si vous souhaitez participer à cette séance à la fin du formulaire de consentement, mais seulement cinq spécialistes de cancer, cinq infirmiers ou infirmières et cinq prestataires de soins paramédicaux seront choisies au hasard par un logiciel pour y participer. Nous communiquerons avec une personne de chaque groupe, qui sera choisie par hasard, pour vérifier si les résultats du rapport représentent adéquatement son opinion.

- **Phase 4 :** Remplir les derniers questionnaires en ligne d’une durée de 20 minutes sur votre opinion à l’égard du fonctionnement de l’équipe.

RISQUES

Il n’y a aucun risque connu associé à cette étude.

AVANTAGES POTENTIELS DE LA PARTICIPATION À L’ÉTUDE

Le volet recherche de cette étude n’apporte aucun avantage direct, mais en y participant, vous nous aiderez à mieux comprendre ce qui constitue un rendement de qualité pour une équipe de soins en oncologie, en particulier durant la pandémie, et vous nous fournirez des informations importantes sur des aspects à améliorer dans le fonctionnement de l’équipe.

RÉMUNÉRATION

Vous ne recevrez aucune rémunération pour votre participation à cette étude.

CONFIDENTIALITÉ

Pour les besoins de cette étude, nous recueillerons des renseignements personnels sur vous, y compris des renseignements permettant de vous identifier. Afin de protéger votre vie privée, tous les renseignements recueillis resteront confidentiels dans la mesure où la loi le permet. La chercheuse principale est responsable de la préservation de la confidentialité des renseignements recueillis.

- **Renseignements personnels codés:**

Afin de préserver la confidentialité de vos renseignements, vous serez identifié uniquement par un numéro d’identification qui vous sera attribué au hasard.

- **Stockage, conservation et destruction des documents :**

Tous les renseignements obtenus dans le cadre de cette étude seront stockés dans Qualtrics, un système électronique sécurisé sur le Web administré par l'Université McGill. L’École des sciences infirmières Ingram détient la licence d’utilisation de Qualtrics, et ce système est utilisé par des gouvernements internationaux, des organisations de soins de santé et des établissements universitaires (dont l'Université McGill, l'Université Yale, Microsoft). Voici les liens aux déclarations (en anglais) relatives à la sécurité et à la confidentialité de Qualtrics :

https://www.qualtrics.com/platform/security/

https://www.qualtrics.com/security-statement/
https://www.qualtrics.com/privacy-statement/

La clé de codage, les formulaires de contact et les formulaires de consentement électroniques seront chacun automatiquement enregistrés et stockés dans des bases de données distinctes dans Qualtrics, et accessibles uniquement par la chercheuse principale et la coordonnatrice et la gestionnaire de la recherche avec des mots de passe uniques.

Les données recueillies (c.-à-d. les réponses aux questionnaires), les enregistrements audios ainsi que leurs transcriptions seront également stockés séparément dans des dossiers protégés par un mot de passe sur le serveur OneDrive de l'Université McGill. La clé de codage sera également stockée sur le serveur OneDrive de l'Université McGill et protégée par un mot de passe. Les enregistrements vidéo ne seront pas stockés; ils seront effacés immédiatement après leur transcription.

Après dix ans, toutes les données électroniques et les données de l'étude sur papier seront détruites (supprimées) définitivement. La chercheuse principale de l'étude est responsable de détruire les données.

- **Discussions en ligne:**

Lors des séances de groupe en ligne, nous demanderons à tous les participants et participantes de garder les renseignements partagés confidentiels. Nous ne pouvons toutefois pas garantir que cette demande sera honorée. Nous modifierons ou dissimulerons toute information sensible ou unique.

- **Droit d'accès aux renseignements recueillis :**

Vous avez le droit d'accéder aux renseignements que vous nous avez fournis pendant l'étude, de même que de les examiner, de les réviser ou de les supprimer, mais vous ne pouvez pas les supprimer ou les réviser une fois que l'analyse des données a commencé. Nous ne pouvons pas supprimer votre participation aux enregistrements vidéo, cependant, vous pouvez demander de supprimer toute information que vous avez fournie.

- **Vérification et surveillance:**

À des fins de surveillance, de contrôle, de protection et de sécurité, votre dossier d'étude pourrait être vérifié par une personne autorisée par le Bureau d'examen de la recherche du CIUSSS du Centre-Ouest-de-l'Île de Montréal. Cette personne est liée par une entente de confidentialité.

PARTICIPATION VOLONTAIRE ET LE DROIT DE RETRAIT

Vous êtes libre de refuser de participer à cette étude. Vous pouvez décider de vous retirer de cette étude en tout temps sans avoir à donner de raison et sans conséquence pour vous, maintenant ou dans l'avenir. Que vous décidiez de participer à l'étude ou pas, ou que vous vous retiriez de cette étude à n'importe quel moment, votre décision n'aura pas d'effet sur la qualité des soins et des services que vous êtes en droit de recevoir.

UTILISATION, COMMUNICATION ET PUBLICATION FUTURES DES RÉSULTATS DE RECHERCHE
Les résultats des questionnaires électroniques seront présentés sous forme de données groupées. Cela signifie qu'aucun résultat individuel ne sera communiqué. Des citations directes des séances en ligne pourront être insérées dans des présentations et des articles scientifiques, mais nous ferons de notre mieux pour garantir la protection de votre vie privée. Nous modifierons ou dissimulerons toute information unique ou sensible. Les résultats seront présentés dans des publications, des conférences et des discussions avec des cliniciens et des cliniciennes.

PERSONNES-RESSOURCES
Si vous avez des questions, vous pouvez communiquer avec la chercheuse responsable de l'étude.

Chercheuse principale : Carmen G. Loiselle, professeure, Université McGill, Département d'oncologie et École des sciences infirmières Ingram, Centre du cancer Segal et l'Institut Lady Davis de recherches médicales
Courriel : **carmen.g.loiselle@mcgill.ca**
Téléphone (recherche) : **514-398-8977**

Vous pouvez également communiquer avec Samar Attieh, doctorante et coordonnatrice de la recherche pour cette étude.
Courriel : **Loiselle.Lab.ccomtl@ssss.gouv.qc.ca**
Téléphone : **514-398-8977**

Si vous avez des questions concernant vos droits pendant votre participation à cette étude, ou si vous avez des plaintes ou des commentaires concernant votre expérience de participation à cette étude, vous pouvez communiquer avec la Commissaire locale aux plaintes et à la qualité des services du CIUSSS Centre-Ouest-de-l'Île-de-Montréal ou avec l'ombudsman de cet établissement au (514) 340-8222, poste 24222.

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Québec

CANCER CARE
TEAM FUNCTIONING

INFORMATION AND CONSENT FORM

(Caregivers: family or friends)

STUDY TITLE: Cancer care team functioning and relationships with patient satisfaction and health-related outcomes: A hybrid multimethod approach

PRINCIPAL INVESTIGATOR: Carmen G. Loiselle, R.N., Ph.D., F.C.A.H.S, Segal Cancer Centre (CIUSSS Centre-Ouest-de-l'Île-de-Montréal) and Department of Oncology and Ingram School of Nursing, Faculty of Medicine, McGill University

DOCTORAL CANDIDATE: Samar Attieh, MSc., MPH., Doctoral Candidate in Experimental Medicine, Faculty of Medicine, McGill University

SOURCE OF FUNDING: Christine and Herschel Victor/Hope and Cope Chair in Psychosocial Oncology

INTRODUCTION

You are invited to participate in an online study. Please take the time to carefully read, understand, and think about the information that has been explained and given to you in this form. If you choose to take part in this study, we will ask you to electronically click on the “next” icon at the end of this consent form, indicating that you agree to participate.

This consent form may contain words or information that you do not fully understand. If this is the case, we encourage you to ask the principal investigator responsible for this study, or a member of the research team, any questions that you may have. Their contact information is found at the end of this consent form. You may ask them to explain all words and information that are unclear, as they have the obligation to answer in such a way that you can understand the information presented to you.

NATURE AND OBJECTIVES OF THE STUDY

In this online study, we are interested in knowing more about people’s perceptions of how cancer care teams work together during COVID-19 and how this may be related to the patient experience. Healthcare professionals, patients, caregivers (e.g., family members, friends) and volunteers will be invited to take part in the study. To be eligible to participate, you must have been the caregiver of someone diagnosed with breast or gynecologic cancer (followed at the Jewish General Hospital, at the breast or gynecologic clinic) for at least 3 months. To be able to complete study procedures, you must have an electronic device and internet access. Ten caregivers caring for patients diagnosed with breast or gynecologic cancer will be recruited for the study, in addition to 115 women diagnosed with breast or gynecologic cancer, 25 healthcare professionals and 5 volunteers involved in the care of patients diagnosed with breast or gynecologic cancer.

STUDY PROCEDURES

You will be asked to complete electronic questionnaires and participate in two online discussion sessions. The study involves 4 main phases spread over 12 months. You will be asked to:

- **Phase 1:** Complete 25-minute online questionnaires, using an electronic device. We will ask you about your background (e.g., age, occupation), your role (e.g., for how long you have been a caregiver) and your view on how cancer team functions during COVID-19.
- **Phase 2:** Participate in a 60-minute group discussion with 2 other caregivers and 2 volunteers (Total of 5) to discuss factors linked to cancer care team performance. This group discussion will be done online via Zoom Pro or Teams. The discussion will be video recorded. You can use a nickname instead of your real name while logged in. If you wish, you also can choose to close your camera, and only use the chat feature instead of speaking. At the end of this consent form, you may indicate if you are interested in participating in this discussion, but only 3 caregivers will be randomly picked by a software program to take part.

  Phase 3: Read a report on early results that will be sent to you by email and later join a 60 to 90 -minute online discussion with other patients, caregivers, volunteers and healthcare professionals. This group discussion will be done online via Zoom Pro or Teams. The discussion will be video recorded. During the discussion, it is possible that you may know other participants and they may know you, as well, such a doctor, the patient or a volunteer. If you do not wish to reveal your identity, you are free to a nickname instead of your real name while logged in. Please choose a nickname that starts with the letter “C” so that the research coordinator knows you are a caregiver. You can also choose to close your camera, and only use the chat feature instead of speaking. In addition, if you feel uncomfortable sharing specific information during the session, you may contact the research team privately anytime during the session and afterwards to share this information. The facilitator will share the contact information of the research team 3 times during the meeting (As well you can find our contact information below). You may indicate if you are interested to participate in this session at the end of this consent form but only 3 caregivers will be randomly picked by a software program to take part. From the 3 caregivers participating, one will be randomly picked and contacted to check if the results in the report accurately represent this participant’s opinion.
- **Phase 4:** Complete the final 20-minute online study questionnaires on your view on how the team functions.

RISKS

No known risks are associated with the study. For some participants, answering questions or discussing cancer-related topic related to someone you care for, may cause negative emotions, such as distress or anxiety, or to be fatigued or uncomfortable. If you were to experience such emotions, fatigue or feel uncomfortable, we will refer you to the nurse pivot, with your permission. She can provide you with a referral to an appropriate resource. In addition, we can provide you with a list of available resources. At the end of each questionnaire, we will also list resources that you may contact, directly.

For the online discussions, the facilitator will inform participants at the beginning, halfway and at the end of the session, that if someone appears to experience negative emotions, is fatigued or uncomfortable, a research team member will contact them using the private chat feature, share with them available resources and notify the nurse pivot within 24 hrs with their permission. The nurse pivot will call them and refer them to appropriate services. The research team contact information will be displayed on screen and on the chat forum for participants who wish to contact us.

E-mail: **Loiselle.Lab.ccomtl@ssss.gouv.qc.ca**
Phone: **514-398-8977**

POTENTIAL BENEFITS RELATED TO RESEARCH PARTICIPATION
There are no direct benefits of the research component of this study, but by participating, you will help us better understand what constitutes quality cancer care team performance, especially during the pandemic, as well as provide important information on areas to improve in team functioning.

COMPENSATION
You will not receive compensation for taking part in this study.

CONFIDENTIALITY
For the purpose of this study, we will collect personal information from you, which includes information that can identify you. To protect your privacy, all information collected will remain confidential to the extent permitted by law. The Principal Investigator is responsible for preserving the confidentiality of the information collected.

- **Personal coded information:**

To keep your information private, you will be identified only by an assigned arbitrary ID number.

- **Storage, Retention and Destruction of Documents:**

All information obtained in this study will each be stored in Qualtrics, a secure web-based electronic system supported by McGill University. Qualtrics is licensed through McGill University's Ingram School of Nursing and is used by international governments, health care organizations, and academic institutions (e.g., McGill University, Yale University, Microsoft). Qualtrics security and privacy statements:

https://www.qualtrics.com/platform/security/

https://www.qualtrics.com/security-statement/
https://www.qualtrics.com/privacy-statement/

The code key, contact forms and the electronic consent forms will be each automatically recorded and stored in separate databases on Qualtrics, and accessed only by the principal investigator, research coordinator and research manager, with unique passwords.

The data collected (i.e., answers to the questionnaires), the audio recordings as well as their transcriptions will also be stored separately in password protected folders on the institutional McGill OneDrive server. The code-key will be also stored on McGill OneDrive and protected with a password. The video recordings will not be stored, they will be deleted immediately after transcription.

After 10 years, all study electronic and paper data will be permanently destroyed (deleted). The researcher in charge of the study is responsible for destroying the data.

- **Online discussions:**

In online group sessions, we will ask all participants to keep the information shared private and confidential. However, we cannot guarantee that this request will be honored. We will change or disguise any sensitive or unique information.

- **Right to access information collected:**

You have the right to access, review, revise or delete information collected from you during the study, however, you cannot delete or revise information once data analysis has begun. We are unable to delete your participation from the video recordings, however, you can ask to delete any information you have provided.

- **Auditing/Monitoring:**

For monitoring, control, protection and security purposes, your study file could be checked by a person authorized by the Research Ethics Committee of the CIUSSS du Centre-Ouest-de-l'Île de Montréal. This person is bound by a confidentiality agreement.

VOLUNTEER PARTICIPATION AND THE RIGHT TO WITHDRAW

You are free to refuse to participate in this study. You may withdraw from this study at any time without having to give a reason and without any consequence to you now or in the future. Whether you decide to participate or not, or if you withdraw at any time from this study, your decision will not affect the quality of care and services in any way.

FUTURE USE, COMMUNCIATION, AND PUBLICATION OF RESEARCH RESULTS

Results from the electronic questionnaires will be presented as grouped data. This means that no individual results will be reported. Direct quotes from the online sessions might be cited in presentations and scientific papers, but we will do our best to ensure that your privacy is protected. We will change or disguise any unique or sensitive information. Results will be presented in publications, conferences, and discussions with clinicians.

COMMERCIALIZATION OF RESULTS

There are no financial conflicts of interest for the research team.

RESOURCE PERSONS

If you have any questions about the study, you can contact the researcher in charge.

Principal Investigator: Dr. Carmen G. Loiselle, Professor, McGill University, Department of Oncology and Ingram School of Nursing, Segal Cancer Centre and Lady Davis Institute for Medical Research
E-mail: **carmen.g.loiselle@mcgill.ca**
Research phone: **514-398-8977**

You can also contact Samar Attieh, doctoral candidate and research coordinator of this study.
E-mail: **Loiselle.Lab.ccomtl@ssss.gouv.qc.ca**
Phone: **514-398-8977**

For all questions concerning your rights during your participation in this study, or if you have any complaints or comments regarding your experience in taking part in this study, you can contact the Local Commissioner of Complaints and Quality of Service of the CIUSSS Centre-Ouest-de-l’Île-de-Montréal or the ombudsman of the institution at (514) 340-8222, ex. 24222.

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Québec

CANCER CARE
TEAM FUNCTIONING

FORMULAIRE DE RENSEIGNEMENTS ET DE CONSENTEMENT

(Aidants naturels (p. ex., membres de la famille, amis))

TITRE DE L'ÉTUDE : Les rapports du fonctionnement de l'équipe de soins en oncologie avec la satisfaction des patientes et les résultats liés à la santé : une approche hybride multiméthodes

CHERCHEUSE PRINCIPALE : Carmen G. Loiselle, infirmière autorisée, PhD, FACSI, Centre du cancer Segal (CIUSSS Centre-Ouest-de-l'Île-de-Montréal) et Département d'oncologie et École des sciences infirmières Ingram, Faculté de médecine, Université McGill

DOCTORANTE : Samar Attieh, MSc, MSP, doctorante à la Division de médecine expérimentale, Université McGill

SOURCE DE FINANCEMENT : Chaire en oncologie psychosociale Christine et Herschel Victor/L'espoir, c'est la vie

INTRODUCTION

Nous vous invitons à participer à une étude en ligne. Veuillez prendre le temps de lire attentivement les renseignements donnés dans le présent formulaire et vous assurer de bien les comprendre. Veuillez cliquer sur l'icône « Suivant » à la fin de ce formulaire de consentement pour nous indiquer que vous acceptez de participer à cette étude.

Ce formulaire de consentement peut contenir des termes ou de l'information qui ne sont pas totalement clairs pour vous. Si c'est le cas, nous vous encourageons à poser vos questions à la chercheuse principale responsable de cette étude ou à un membre de l'équipe de recherche. Vous trouverez leurs coordonnées à la fin de ce formulaire de consentement. Vous pouvez leur demander de vous expliquer tous les termes ou informations qui ne sont pas clairs; elles ont l'obligation de vous aider à bien comprendre l'information qui vous est présentée.

NATURE ET OBJECTIFS DE L'ÉTUDE

Dans cette étude en ligne, nous souhaitons mieux connaître la perception des gens de la qualité du travail des membres de l'équipe de soins en oncologie et le lien que cela peut avoir avec l'expérience des patientes durant la COVID-19. Des prestataires de soins de santé, des patientes et des aidants naturels (p. ex., membres de la famille, amis) et des bénévoles seront invités à prendre part à cette étude. Pour être admissible à participer, vous devez avoir été l'aidant naturel d'une personne atteinte d'un cancer du sein ou d'un cancer gynécologique (qui est suivie à l’Hôpital général juif, à la clinique du cancer du sein ou à celle du cancer gynécologique) pendant au moins trois mois. Pour pouvoir suivre la procédure de l’étude, vous devez également avoir un appareil électronique et un accès Internet. Pour cette étude, nous recruterons 115 femmes atteintes d’un cancer du sein ou d’un cancer gynécologique, 10 aidants naturels d’une personne ayant reçu un diagnostic de cancer du sein ou de cancer gynécologique, 5 bénévoles aux services des soins relatifs au cancer du sein ou au cancer gynécologique, ainsi que 25 prestataires de soins de santé à des patientes ayant reçu un diagnostic de cancer du sein ou de cancer gynécologique.

PROCÉDURE DE L’ÉTUDE

Il vous sera demandé de remplir des questionnaires électroniques et de participer à deux séances de discussion en ligne. L’étude comporte quatre phases principales échelonnées sur douze mois. Voici ce qu’il vous sera demandé :

- **Phase 1 :** Remplir des questionnaires en ligne d’une durée de 25 minutes au moyen d’un appareil électronique. Nous vous poserons des questions sur votre situation (p. ex., âge, occupation), votre rôle (p. ex., depuis combien de temps vous êtes un(e) aidant(e) naturel(le) et votre perception du fonctionnement de l’équipe de soins en oncologie durant la COVID-19.
- **Phase 2 :** Participer à une discussion de groupe d’une durée de 60 minutes avec deux autres aidants naturels et 2 bénévoles (5 au total) pour discuter des facteurs liés au rendement de l’équipe de soins en oncologie. Cette discussion de groupe se fera en ligne au moyen de Zoom Pro ou Teams. La discussion sera enregistrée sur vidéo. Vous pouvez utiliser un surnom plutôt que votre vrai nom lorsque vous vous connectez. Si vous voulez, vous pouvez aussi choisir d’éteindre votre caméra, et utiliser la fonction de clavardage plutôt que de parler. À la fin de ce formulaire de consentement, vous pouvez indiquer si vous souhaitez participer à cette discussion. Cependant, seulement 3 personnes seront choisies au hasard par un logiciel pour prendre part à la discussion.
- **Phase 3 :** Lire un rapport sur les résultats préliminaires qui vous sera envoyé par courriel, puis participer à une discussion en ligne d’une durée de 60 à 90 minutes avec les autres patientes, aidants naturels, bénévoles et prestataires de soins. Cette discussion de groupe se fera en ligne au moyen de Zoom Pro ou Teams. La discussion sera enregistrée sur vidéo. Il se peut que vous connaissiez d’autres personnes participant à cette discussion et qu’elles vous connaissent aussi, par exemple un médecin, un aidant naturel ou une bénévole. Si vous préférez ne pas révéler votre identité, vous être libre d’utiliser un surnom au lieu de votre vrai nom lorsque vous vous connectez. Veuillez choisir un surnom qui commence par la lettre C afin que la coordonnatrice de la recherche sache que vous êtes un aidant naturel. Vous pouvez aussi choisir d’éteindre votre caméra, et utiliser seulement la fonction de clavardage plutôt que de parler. De plus, si vous vous sentez mal à l’aise de partager certains renseignements pendant la séance, vous pouvez communiquer en privé avec l’équipe de recherche à tout moment pendant et après la séance pour lui communiquer ces renseignements. L’animateur ou animatrice communiquera les coordonnées de l’équipe de recherche à trois reprises au cours de la rencontre. (Vous trouverez également nos

coordonnées ci-dessous). Vous pouvez indiquer si vous souhaitez participer à cette séance à la fin du formulaire de consentement, mais seulement 3 personnes seront choisies au hasard par un logiciel pour y participer. Nous communiquerons avec une de ces trois personnes, qui sera choisie par hasard, pour vérifier si les résultats du rapport représentent adéquatement son opinion.

- **Phase 4 :** Remplir les derniers questionnaires en ligne d'une durée de 20 minutes sur votre opinion à l'égard du fonctionnement de l'équipe et votre expérience des soins.

RISQUES

Il n'y a aucun risque connu associé à cette étude. Cependant, répondre à des questions sur des sujets liés au cancer d'une personne dont vous prenez soin ou en discuter peut provoquer des émotions négatives, telles que de la détresse ou de l'anxiété, ou causer de la fatigue ou un inconfort. Si jamais vous ressentez de telles émotions, avec votre permission, nous vous dirigerons vers l'infirmière-pivot, qui pourra vous orienter vers une ressource appropriée. Nous pouvons également vous fournir une liste des ressources disponibles. À la fin de chaque questionnaire, nous indiquerons également une liste des ressources avec lesquelles vous pourrez communiquer directement.

Pour les discussions en ligne, l'animateur ou animatrice avisera les participants et les participantes au début, au milieu et à la fin de la séance que si une personne semble vivre des émotions négatives, ou est fatiguée ou inconfortable, un membre de l'équipe de recherche communiquera avec elle à l'aide de la fonction clavardage privé, et l'orientera, avec sa permission, vers une ressource appropriée. La coordonnatrice de la recherche communiquera une liste de ressources et avisera l'infirmière-pivot dans les 24 heures, avec sa permission. Les coordonnées de l'équipe de recherche seront affichées à l'écran et dans le forum de discussion pour les participants et les participantes qui souhaitent communiquer avec nous.

Courriel : **Loiselle.Lab.ccomtl@ssss.gouv.qc.ca**
Téléphone : **514-398-8977**

AVANTAGES POTENTIELS DE LA PARTICIPATION À L'ÉTUDE

Le volet recherche de cette étude n'apporte aucun avantage direct, mais en y participant, vous nous aiderez à mieux comprendre ce qui constitue un rendement de qualité pour une équipe de soins en oncologie, en particulier durant la pandémie, et vous nous fournirez des informations importantes sur des aspects à améliorer dans le fonctionnement de l'équipe.

RÉMUNÉRATION

Vous ne recevrez aucune rémunération pour votre participation à cette étude.

CONFIDENTIALITÉ

Pour les besoins de cette étude, nous recueillerons des renseignements personnels sur vous, y compris des renseignements permettant de vous identifier. Afin de protéger votre vie privée, tous les renseignements recueillis resteront confidentiels dans la mesure où la loi le permet. La chercheuse principale est responsable de la préservation de la confidentialité des renseignements recueillis.

- **Renseignements personnels codés:**

Afin de préserver la confidentialité de vos renseignements, vous serez identifié uniquement par un numéro d'identification qui vous sera attribué au hasard.

- **Stockage, conservation et destruction des documents :**

Tous les renseignements obtenus dans le cadre de cette étude seront stockés dans Qualtrics, un système électronique sécurisé sur le Web administré par l'Université McGill. L'École des sciences infirmières Ingram détient la licence d'utilisation de Qualtrics, et ce système est utilisé par des gouvernements internationaux, des organisations de soins de santé et des établissements universitaires (dont l'Université McGill, l'Université Yale, Microsoft). Voici les liens aux déclarations (en anglais) relatives à la sécurité et à la confidentialité de Qualtrics :

https://www.qualtrics.com/platform/security/
https://www.qualtrics.com/security-statement/
https://www.qualtrics.com/privacy-statement/

La clé de codage, les formulaires de contact et les formulaires de consentement électroniques seront chacun automatiquement enregistrés et stockés dans des bases de données distinctes dans Qualtrics, et accessibles uniquement par la chercheuse principale, la coordonnatrice et gestionnaire de la recherche avec des mots de passe uniques.

Les données recueillies (c.-à-d. les réponses aux questionnaires), les enregistrements audios ainsi que leurs transcriptions seront également stockés séparément dans des dossiers protégés par un mot de passe sur le serveur OneDrive de l'Université McGill. La clé de codage sera également stockée sur le serveur OneDrive de l'Université McGill et protégée par un mot de passe. Les enregistrements vidéo ne seront pas stockés; ils seront effacés immédiatement après leur transcription.

Après dix ans, toutes les données électroniques et les données de l'étude sur papier seront détruites (supprimées) définitivement. La chercheuse principale de l'étude est responsable de détruire les données.

- **Discussions en ligne:**

Lors des séances de groupe en ligne, nous demanderons à tous les participants et participantes de garder les renseignements partagés confidentiels. Nous ne pouvons toutefois pas garantir que cette demande sera honorée. Nous modifierons ou dissimulerons toute information sensible ou unique.

- **Droit d’accès aux renseignements recueillis :**

Vous avez le droit d’accéder aux renseignements que vous nous avez fournis pendant l’étude, de même que de les examiner, de les réviser ou de les supprimer, mais vous ne pouvez pas les supprimer ou les réviser une fois que l’analyse des données a commencé. Nous ne pouvons pas supprimer votre participation aux enregistrements vidéo, cependant, vous pouvez demander de supprimer toute information que vous avez fournie.

- **Vérification et surveillance:**

À des fins de surveillance, de contrôle, de protection et de sécurité, votre dossier d’étude pourrait être vérifié par une personne autorisée par le Bureau d’examen de la recherche du CIUSSS du Centre-Ouest-de-l’Île de Montréal. Cette personne est liée par une entente de confidentialité.

PARTICIPATION VOLONTAIRE ET LE DROIT DE RETRAIT

Vous êtes libre de refuser de participer à cette étude. Vous pouvez décider de vous retirer de cette étude en tout temps sans avoir à donner de raison et sans conséquence pour vous, maintenant ou dans l’avenir. Que vous décidiez de participer à l’étude ou pas, ou que vous vous retiriez de cette étude à n’importe quel moment, votre décision n’aura pas d’effet sur la qualité des soins et des services.

UTILISATION, COMMUNICATION ET PUBLICATION FUTURES DES RÉSULTATS DE RECHERCHE

Les résultats des questionnaires électroniques seront présentés sous forme de données groupées. Cela signifie qu’aucun résultat individuel ne sera communiqué. Des citations directes des séances en ligne pourront être insérées dans des présentations et des articles scientifiques, mais nous ferons de notre mieux pour garantir la protection de votre vie privée. Nous modifierons ou dissimulerons toute information unique ou sensible. Les résultats seront présentés dans des publications, des conférences et des discussions avec des cliniciens et des cliniciennes.

PERSONNES-RESSOURCES

Si vous avez des questions, vous pouvez communiquer avec la chercheuse responsable de l’étude.

Chercheuse principale : Carmen G. Loiselle, professeure, Université McGill, Département d’oncologie et École des sciences infirmières Ingram, Centre du cancer Segal et l’Institut Lady Davis de recherches médicales
Courriel: **carmen.g.loiselle@mcgill.ca**
Téléphone (recherche): **514-398-8977**

Vous pouvez également communiquer avec Samar Attieh, doctorante et coordonnatrice de la recherche pour cette étude.

Courriel : **Loiselle.Lab.ccomtl@ssss.gouv.qc.ca**
Téléphone : **514-398-8977**

Si vous avez des questions concernant vos droits pendant votre participation à cette étude, ou si vous avez des plaintes ou des commentaires concernant votre expérience de participation à cette étude, vous pouvez communiquer avec la Commissaire locale aux plaintes et à la qualité des services du CIUSSS Centre-Ouest-de-l'Île-de-Montréal ou avec l'ombudsman de cet établissement au (514) 340-8222, poste 24222.

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Québec

CANCER CARE
TEAM FUNCTIONING

INFORMATION AND CONSENT FORM
(Volunteers)

STUDY TITLE: Cancer care team functioning and relationships with patient satisfaction and health-related outcomes: A hybrid multimethod approach

PRINCIPAL INVESTIGATOR: Carmen G. Loiselle, R.N., Ph.D., F.C.A.H.S, Segal Cancer Centre (CIUSSS Centre-Ouest-de-l'Île-de-Montréal) and Department of Oncology and Ingram School of Nursing, Faculty of Medicine, McGill University

DOCTORAL CANDIDATE: Samar Attieh, MSc., MPH., Doctoral Candidate in Experimental Medicine, Faculty of Medicine, McGill University

SOURCE OF FUNDING: Christine and Herschel Victor/Hope and Cope Chair in Psychosocial Oncology

INTRODUCTION
You are invited to participate in an online study. Please take the time to carefully read, understand, and think about the information that has been explained and given to you in this form. If you choose to take part in this study, we will ask you to electronically click on the "next" icon at the end of this consent form, indicating that you agree to participate.

This consent form may contain words or information that you do not fully understand. If this is the case, we encourage you to ask the principal investigator responsible for this study, or a member of the research team, any questions that you may have. Their contact information is found at the end of this consent form. You may ask them to explain all words and information that are unclear, as they have the obligation to answer in such a way that you can understand the information presented to you.

NATURE AND OBJECTIVES OF THE STUDY
In this online study, we are interested in knowing more about people's perceptions of how cancer care teams work together and how this may be related to the patient experience during COVID-19. Healthcare professionals, patients, volunteers and caregivers (e.g., family members, friends) will be invited to take part in the study. To be eligible to participate, you must have been volunteering in the breast or gynecologic clinics at the JGH for at least 3 months. To be able to complete the study procedures, you must have an electronic device and internet access. 115 women with breast or gynecologic cancer, 25 healthcare professionals involved in the care

of patients diagnosed with breast or gynecologic cancer, 10 caregivers and 5 volunteers caring for patients with breast or gynecologic cancers will be recruited.

STUDY PROCEDURES

You will be asked to complete electronic questionnaires and participate in two online discussion sessions. The study involves 4 main phases spread over 12 months. You will be asked to:

- **Phase 1:** Complete 25-minute online questionnaires, using an electronic device. We will ask you about your background (e.g., age, occupation), your role (e.g., for how long you have been volunteering) and your view on how cancer team functions during COVID-19.
- **Phase 2:** Participate in a 60-minute group discussion with one other volunteer and 3 caregivers (A total of 5) to discuss factors linked to cancer care team performance. This group discussion will be done online via Zoom Pro or Teams. The discussion will be video recorded. You can use a nickname instead of your real name while logged in. If you wish, you also can choose to close your camera, and only use the chat feature instead of speaking. At the end of this consent form, you may indicate if you are interested in participating in this discussion, but only 2 volunteers will be randomly picked by a software program to take part.

  Phase 3: Read a report on early results that will be sent to you by email and later join a 60 to 90 -minute online discussion with other patients, caregivers, volunteers, and healthcare professionals via Zoom Pro or Teams. During the discussion, it is possible that you may know other participants and they may know you, as well, such a doctor, a caregiver, or a volunteer. If you do not wish to reveal your identity, you are free to a nickname instead of your real name while logged in. Please choose a nickname that starts with the letter "V" so that the research coordinator knows you are a volunteer. You can also choose to close your camera, and only use the chat feature instead of speaking. In addition, if you feel uncomfortable sharing specific information during the session, you may contact the research team privately anytime during the session and afterward to share this information. The facilitator will share the contact information of the research team 3 times during the meeting (As well you can find our contact information below). You may indicate if you are interested to participate in this session at the end of this consent form but only 2 volunteers will be randomly picked by a software program to take part. From the 2 volunteers participating, one will be randomly picked and contacted to check if the results in the report accurately represent this participant's opinion.
- **Phase 4:** Complete the final 20-minute online study questionnaires on your view on how the team functions.

RISKS

No known risks are associated with the study.

POTENTIAL BENEFITS RELATED TO RESEARCH PARTICIPATION

There are no direct benefits of the research component of this study, but by participating, you will help us better understand what constitutes quality cancer care team performance, especially during the pandemic, as well as provide important information on areas to improve in team functioning.

COMPENSATION
You will not receive compensation for taking part in this study.

CONFIDENTIALITY
For the purpose of this study, we will collect personal information from you, which includes information that can identify you. To protect your privacy, all information collected will remain confidential to the extent permitted by law. The Principal Investigator is responsible for preserving the confidentiality of the information collected.

- **Personal coded information:**

To keep your information private, you will be identified only by an assigned arbitrary ID number.

- **Storage, Retention and Destruction of Documents:**

All information obtained in this study will each be stored in Qualtrics, a secure web-based electronic system supported by McGill University. Qualtrics is licensed through McGill University's Ingram School of Nursing and is used by international governments, health care organizations, and academic institutions (e.g., McGill University, Yale University, Microsoft). Qualtrics security and privacy statements:

https://www.qualtrics.com/platform/security/
https://www.qualtrics.com/security-statement/
https://www.qualtrics.com/privacy-statement/

The code key, contact forms and the electronic consent forms will be each automatically recorded and stored in separate databases on Qualtrics, and accessed only by the principal investigator, research coordinator and research manager, with unique passwords.

The data collected (i.e., answers to the questionnaires), the audio recordings as well as their transcriptions will also be stored separately in password protected folders on the institutional McGill OneDrive server. The code key will also be stored in a password protected folder on the secure McGill Drive. The video recordings will not be stored, they will be deleted immediately after transcription After 10 years, all study electronic and paper data will be permanently destroyed (deleted). The researcher in charge of the study is responsible for destroying the data.

- **Online discussions:**

In online group sessions, we will ask all participants to keep the information shared private and confidential. However, we cannot guarantee that this request will be honored. We will change or disguise any sensitive or unique information.

- **Right to access information collected:**

You have the right to access, review, revise or delete information collected from you during the study, however, you cannot delete or revise information once data analysis has begun. We are unable to delete your participation from the video recordings, however, you can ask to delete any information you have provided.

- **Auditing/Monitoring:**

For monitoring, control, protection and security purposes, your study file could be checked by a person authorized by the Research Ethics Committee of the CIUSSS du Centre-Ouest-de-l'Île de Montréal. This person is bound by a confidentiality agreement.

VOLUNTEER PARTICIPATION AND THE RIGHT TO WITHDRAW

You are free to refuse to participate in this study. You may withdraw from this study at any time without having to give a reason and without any consequence to you now or in the future. Whether you decide to participate or not, or if you withdraw at any time from this study, your decision will not affect your current or future volunteering work in any way.

FUTURE USE, COMMUNICATION, AND PUBLICATION OF RESEARCH RESULTS

Results from the electronic questionnaires will be presented as grouped data. This means that no individual results will be reported. Direct quotes from the online sessions might be cited in presentations and scientific papers, but we will do our best to ensure that your privacy is protected. We will change or disguise any unique or sensitive information. Results will be presented in publications, conferences, and discussions with clinicians.

RESOURCE PERSONS

If you have any questions about the study, you can contact the researcher in charge.

Principal Investigator: Dr. Carmen G. Loiselle, Professor, McGill University, Department of Oncology and Ingram School of Nursing, Segal Cancer Centre and Lady Davis Institute for Medical Research
E-mail: **carmen.g.loiselle@mcgill.ca**
Research phone: **514-398-8977**

You can also contact Samar Attieh, doctoral candidate and research coordinator of this study.
E-mail: **Loiselle.Lab.ccomtl@ssss.gouv.qc.ca**
Phone: **514-398-8977**

For all questions concerning your rights during your participation in this study, or if you have any complaints or comments regarding your experience in taking part in this study, you can contact the Local Commissioner of Complaints and Quality of Service of the CIUSSS Centre-Ouest-de-l'Île-de-Montréal or the ombudsman of the institution at (514) 340-8222, ex. 24222.

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Québec

CANCER CARE
TEAM FUNCTIONING

FORMULAIRE DE RENSEIGNEMENTS ET DE CONSENTEMENT
(Bénévoles)

TITRE DE L'ÉTUDE : Les rapports du fonctionnement de l'équipe de soins en oncologie avec la satisfaction des patientes et les résultats liés à la santé : une approche hybride multiméthodes

CHERCHEUSE PRINCIPALE : Carmen G. Loiselle, infirmière autorisée, PhD, FACSI, Centre du cancer Segal (CIUSSS Centre-Ouest-de-l'Île-de-Montréal) et Département d'oncologie et École des sciences infirmières Ingram, Faculté de médecine, Université McGill

DOCTORANTE : Samar Attieh, MSc, MSP, doctorante à la Division de médecine expérimentale, Université McGill

SOURCE DE FINANCEMENT : Chaire en oncologie psychosociale Christine et Herschel Victor/L'espoir, c'est la vie

INTRODUCTION
Nous vous invitons à participer à une étude en ligne. Veuillez prendre le temps de lire attentivement les renseignements donnés dans le présent formulaire et vous assurer de bien les comprendre. Veuillez cliquer sur l'icône « Suivant » à la fin de ce formulaire de consentement pour nous indiquer que vous acceptez de participer à cette étude.

Ce formulaire de consentement peut contenir des termes ou de l'information qui ne sont pas totalement clairs pour vous. Si c'est le cas, nous vous encourageons à poser vos questions à la chercheuse principale responsable de cette étude ou à un membre de l'équipe de recherche. Vous trouverez leurs coordonnées à la fin de ce formulaire de consentement. Vous pouvez leur demander de vous expliquer tous les termes ou informations qui ne sont pas clairs; elles ont l'obligation de vous aider à bien comprendre l'information qui vous est présentée.

NATURE ET OBJECTIFS DE L'ÉTUDE
Dans cette étude en ligne, nous souhaitons mieux connaître la perception des gens de la qualité du travail des membres de l'équipe de soins en oncologie et le lien que cela peut avoir avec l'expérience des patientes durant la COVID-19. Des prestataires de soins de santé, des patientes et des aidants naturels (p. ex., membres de la famille, amis) et des bénévoles seront invités à prendre part à cette étude. Pour être admissible à participer, vous devez avoir été bénévole à la

clinique du cancer du sein ou à celle du cancer gynécologique à l'Hôpital général juif pendant au moins trois mois. Pour pouvoir suivre la procédure de l'étude, vous devez également avoir un appareil électronique et un accès Internet. Pour cette étude, nous recruterons 115 femmes atteintes d'un cancer du sein ou d'un cancer gynécologique, 10 aidants naturels d'une personne ayant reçu un diagnostic de cancer du sein ou de cancer gynécologique, 5 bénévoles aux services des soins relatifs au cancer du sein ou au cancer gynécologique, ainsi que 25 prestataires de soins de santé à des patientes ayant reçu un diagnostic de cancer du sein ou de cancer gynécologique.

PROCÉDURE DE L'ÉTUDE

Il vous sera demandé de remplir des questionnaires électroniques et de participer à deux séances de discussion en ligne. L'étude comporte quatre phases principales échelonnées sur douze mois. Voici ce qu'il vous sera demandé :

- **Phase 1 :** Remplir des questionnaires en ligne d'une durée de 25 minutes au moyen d'un appareil électronique. Nous vous poserons des questions sur votre situation (p. ex., âge, occupation), votre rôle (p. ex., depuis combien de temps vous êtes bénévole) et votre perception du fonctionnement de l'équipe de soins en oncologie durant la COVID-19.
- **Phase 2 :** Participer à une discussion de groupe d'une durée de 60 minutes avec un autre bénévole et trois aidants naturels pour discuter des facteurs liés au rendement de l'équipe de soins en oncologie. Cette discussion de groupe se fera en ligne au moyen de Zoom Pro ou Teams. La discussion sera enregistrée sur vidéo. Vous pouvez utiliser un surnom plutôt que votre vrai nom lorsque vous vous connectez. Si vous voulez, vous pouvez aussi choisir d'éteindre votre caméra, et utiliser la fonction de clavardage plutôt que de parler. À la fin de ce formulaire de consentement, vous pouvez indiquer si vous souhaitez participer à cette discussion. Cependant, seulement deux bénévoles seront choisies au hasard par un logiciel pour prendre part à la discussion.
- **Phase 3 :** Lire un rapport sur les résultats préliminaires qui vous sera envoyé par courriel, puis participer à une discussion en ligne d'une durée de 60 à 90 minutes avec les autres patientes, aidants naturels, bénévoles et prestataires de soins. Cette discussion de groupe se fera en ligne au moyen de Zoom Pro ou Teams. La discussion sera enregistrée sur vidéo. Il se peut que vous connaissiez d'autres personnes participant à cette discussion et qu'elles vous connaissent aussi, par exemple un médecin, un aidant naturel ou une bénévole. Si vous préférez ne pas révéler votre identité, vous être libre d'utiliser un surnom au lieu de votre vrai nom lorsque vous vous connectez. Veuillez choisir un surnom qui commence par la lettre V afin que la coordonnatrice de la recherche sache que vous êtes bénévole. Vous pouvez aussi choisir d'éteindre votre caméra, et utiliser seulement la fonction de clavardage plutôt que de parler. De plus, si vous vous sentez mal à l'aise de partager certains renseignements pendant la séance, vous pouvez communiquer en privé avec l'équipe de recherche à tout moment pendant et après la séance pour lui communiquer ces renseignements. L'animateur ou animatrice communiquera les coordonnées de l'équipe de recherche à trois reprises au cours de la rencontre. (Vous trouverez également nos coordonnées ci-dessous). Vous pouvez indiquer si vous souhaitez participer à cette séance à la fin du

formulaire de consentement, mais seulement deux bénévoles seront choisies au hasard par un logiciel pour y participer. Nous communiquerons avec une des deux personnes, qui sera choisie par hasard, pour vérifier si les résultats du rapport représentent adéquatement son opinion.

- **Phase 4 :** Remplir les derniers questionnaires en ligne d'une durée de 20 minutes sur votre opinion à l'égard du fonctionnement de l'équipe.

RISQUES
Il n'y a aucun risque connu associé à cette étude.

AVANTAGES POTENTIELS DE LA PARTICIPATION À L'ÉTUDE
Le volet recherche de cette étude n'apporte aucun avantage direct, mais en y participant, vous nous aiderez à mieux comprendre ce qui constitue un rendement de qualité pour une équipe de soins en oncologie, en particulier durant la pandémie, et vous nous fournirez des informations importantes sur des aspects à améliorer dans le fonctionnement de l'équipe.

RÉMUNÉRATION
Vous ne recevrez aucune rémunération pour votre participation à cette étude.

CONFIDENTIALITÉ
Pour les besoins de cette étude, nous recueillerons des renseignements personnels sur vous, y compris des renseignements permettant de vous identifier. Afin de protéger votre vie privée, tous les renseignements recueillis resteront confidentiels dans la mesure où la loi le permet. La chercheuse principale est responsable de la préservation de la confidentialité des renseignements recueillis.

- **Renseignements personnels codés:**

Afin de préserver la confidentialité de vos renseignements, vous serez identifié uniquement par un numéro d'identification qui vous sera attribué au hasard.

- **Stockage, conservation et destruction des documents :**

Tous les renseignements obtenus dans le cadre de cette étude seront stockés dans Qualtrics, un système électronique sécurisé sur le Web administré par l'Université McGill. L'École des sciences infirmières Ingram détient la licence d'utilisation de Qualtrics, et ce système est utilisé par des gouvernements internationaux, des organisations de soins de santé et des établissements universitaires (dont l'Université McGill, l'Université Yale, Microsoft). Voici les liens aux déclarations (en anglais) relatives à la sécurité et à la confidentialité de Qualtrics :

https://www.qualtrics.com/platform/security/
https://www.qualtrics.com/security-statement/
https://www.qualtrics.com/privacy-statement/

La clé de codage, les formulaires de contact et les formulaires de consentement électroniques seront chacun automatiquement enregistrés et stockés dans des bases de données distinctes dans Qualtrics, et accessibles uniquement par la chercheuse principale, la coordonnatrice et la gestionnaire de la recherche avec des mots de passe uniques.

Les données recueillies (c.-à-d. les réponses aux questionnaires), les enregistrements audios ainsi que leurs transcriptions seront également stockés séparément dans des dossiers protégés par un mot de passe sur le serveur OneDrive de l'Université McGill. La clé de codage sera également stockée sur le serveur OneDrive de l'Université McGill et protégée par un mot de passe. Les enregistrements vidéo ne seront pas stockés; ils seront effacés immédiatement après leur transcription.

Après dix ans, toutes les données électroniques et les données de l'étude sur papier seront détruites (supprimées) définitivement. La chercheuse principale de l'étude est responsable de détruire les données.

- **Discussions en ligne:**

Lors des séances de groupe en ligne, nous demanderons à tous les participants et participantes de garder les renseignements partagés confidentiels. Nous ne pouvons toutefois pas garantir que cette demande sera honorée. Nous modifierons ou dissimulerons toute information sensible ou unique.

- **Droit d'accès aux renseignements recueillis :**

Vous avez le droit d'accéder aux renseignements que vous nous avez fournis pendant l'étude, de même que de les examiner, de les réviser ou de les supprimer, mais vous ne pouvez pas les supprimer ou les réviser une fois que l'analyse des données a commencé. Nous ne pouvons pas supprimer votre participation aux enregistrements vidéo, cependant, vous pouvez demander de supprimer toute information que vous avez fournie.

- **Vérification et surveillance:**

À des fins de surveillance, de contrôle, de protection et de sécurité, votre dossier d'étude pourrait être vérifié par une personne autorisée par le Bureau d'examen de la recherche du CIUSSS du Centre-Ouest-de-l'Île de Montréal. Cette personne est liée par une entente de confidentialité.

PARTICIPATION VOLONTAIRE ET LE DROIT DE RETRAIT

Vous êtes libre de refuser de participer à cette étude. Vous pouvez décider de vous retirer de cette étude en tout temps sans avoir à donner de raison et sans conséquence pour vous, maintenant ou dans l'avenir. Que vous décidiez de participer à l'étude ou pas, ou que vous vous retiriez de cette étude à n'importe quel moment, votre décision n'aura pas d'effet sur la qualité des soins et des services que vous êtes en droit de recevoir.

UTILISATION, COMMUNICATION ET PUBLICATION FUTURES DES RÉSULTATS DE RECHERCHE

Les résultats des questionnaires électroniques seront présentés sous forme de données groupées. Cela signifie qu'aucun résultat individuel ne sera communiqué. Des citations directes des séances en ligne pourront être insérées dans des présentations et des articles scientifiques, mais nous ferons de notre mieux pour garantir la protection de votre vie privée. Nous modifierons ou dissimulerons toute information unique ou sensible. Les résultats seront présentés dans des publications, des conférences et des discussions avec des cliniciens et des cliniciennes.

PERSONNES-RESSOURCES

Si vous avez des questions, vous pouvez communiquer avec la chercheuse responsable de l'étude.

Chercheuse principale : Carmen G. Loiselle, professeure, Université McGill, Département d'oncologie et École des sciences infirmières Ingram, Centre du cancer Segal et l'Institut Lady Davis de recherches médicales
Courriel : **carmen.g.loiselle@mcgill.ca**
Téléphone (recherche) : **514-398-8977**

Vous pouvez également communiquer avec Samar Attieh, doctorante et coordonnatrice de la recherche pour cette étude.
Courriel : **Loiselle.Lab.ccomtl@ssss.gouv.qc.ca**
Téléphone : **514-398-8977**

Si vous avez des questions concernant vos droits pendant votre participation à cette étude, ou si vous avez des plaintes ou des commentaires concernant votre expérience de participation à cette étude, vous pouvez communiquer avec la Commissaire locale aux plaintes et à la qualité des services du CIUSSS Centre-Ouest-de-l'Île-de-Montréal ou avec l'ombudsman de cet établissement au (514) 340-8222, poste 24222.

Appendix I: Questionnaires EN/FR

Patients' questionnaires

Patient Satisfaction with Cancer Care (Jean-Pierre et al., 2011) (At T1 and T2)

The scale was adapted with minimal changes to reflect patient interactions with cancer health care professionals rather than doctors in general.

Please indicate the team responsible for your cancer care (select one):

- Breast cancer team
- Gynecologic cancer team

We are interested in your overall experience with cancer care you received **during COVID-19**.

Please rate the extent to which you disagree (1) or agree (5) with each statement below.

Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	2	3	4	5

1. I felt that my health concerns were understood
2. I felt that I was treated with courtesy and respect
3. I felt included in decisions about my cancer
4. I was told how to take care of myself
5. I felt encouraged to talk about my personal health concerns
6. I felt I had enough time with my oncologist
7. My questions were answered to my satisfaction
8. Making an appointment was easy
9. I knew what the next step in my cancer care would be
10. I feel confident in how I deal with the health care system
11. I was able to get the advice I needed about my cancer-related issues
12. I knew who to contact when I had a question
13. I received all the services I needed
14. I am satisfied with the cancer care I received (or currently receiving)
15. The healthcare professionals seemed to communicate well about my cancer care
16. I received high-quality cancer care from my oncologist
17. I received high-quality care from other healthcare professionals involved in my cancer care
18. My oncologist was informed about the results of the tests I got

Patient Perceptions of Team Effectiveness (Kilpatrick et al., 2019) (At T1 and T2)

The scale was adapted with minimal changes to reflect the cancer care team rather than a general healthcare team

The following statements are about your perceptions of how your cancer health care professionals work as a team. Please answer the following questions about team effectiveness **during COVID-19**

Please rate the extent to which you disagree (1) or agree (6) with each statement below.

Strongly disagree	Disagree	Disagree somewhat	Agree somewhat	Agree	Strongly agree
1	2	3	4	5	6

1. The roles of members of the cancer care team are well-defined
2. I am happy with the way work is divided among members of the cancer care team
3. I have a role to play in the cancer care team
4. My contribution is valued by members of the cancer care team
5. I trust all the members of the cancer care team
6. The team is effective in providing cancer care
7. Team members share relevant information to help me make decisions about my cancer care
8. Cancer care team members know the goals of my plan of care
9. The test results and consultations are updated in my chart
10. The flow of information between team members, patients, friends and families is **constrained (limited)**
11. Team members work together to solve my cancer care issues
12. I am aware of the next steps in my plan of care
13. My cancer care team adjusts treatments according to changes in my condition
14. My ideas, information or observations are valued by members of my cancer care team
15. Differences of opinions among team members are respected
16. Working with friends or families to solve patient cancer care issues is **not** part of the team's mandate
17. My cancer care is well-organized
18. Patient cancer care is delivered in a timely manner
19. I easily have access to cancer care professionals who order tests and/or medication
20. Potential or actual complications are dealt with quickly by the team
21. I return home with **unanswered** questions about my medication
22. All relevant information is available to my cancer care team if I need to consult another healthcare professional or if I am hospitalized on another unit
23. I return home with all my questions answered about my cancer care
24. Members of the cancer care team possess in-depth knowledge and the skills required to provide care

Relational Coordination (Gittell et al., 2000) (At T1 and T2)

The scale was adapted for use with minimal changes to reflect patients' perceptions of cancer team communication and relationships.

Please select the team you are providing feedback on:

- Breast cancer team
- Gynecologic cancer team

The following asks about communication and relationships among your cancer team members (e,g., cancer specialists, nurses and other allied healthcare professionals)

- *Cancer specialists include medical, surgical and radiation oncologists*

- *Nurses include head nurses, nurse navigators (nurse pivots), nurse practitioners and oncology nurses*
- *Allied healthcare professionals include geneticists, nutritionists, physiotherapists, occupational therapists, psychiatrists, psychologists, and social workers*

Please respond to the following questions about your cancer care team communication and relationships **during COVID-19**.

1. In your opinion, how ***frequently*** do your cancer care team members communicate with each other about patients?

Cancer specialists	Never	Rarely	Occasionally	Often	Constantly
Nurses	Never	Rarely	Occasionally	Often	Constantly
Allied healthcare professionals	Never	Rarely	Occasionally	Often	Constantly

2. In your opinion, do they communicate with each other in a ***timely*** way about patients?

Cancer specialists	Never	Rarely	Occasionally	Often	Always
Nurses	Never	Rarely	Occasionally	Often	Always
Allied healthcare professionals	Never	Rarely	Occasionally	Often	Always

3. In your opinion, do they communicate with each other ***accurately*** about patients?

Cancer specialists	Never	Rarely	Occasionally	Often	Always
Nurses	Never	Rarely	Occasionally	Often	Always
Allied healthcare professionals	Never	Rarely	Occasionally	Often	Always

4. In your opinion, when problems arise regarding the care of patients, do they ***work with** each other* to solve the problem?

Cancer specialists	Never	Rarely	Occasionally	Often	Always
Nurses	Never	Rarely	Occasionally	Often	Always
Allied healthcare professionals	Never	Rarely	Occasionally	Often	Always

5. In your opinion, how much do they ***know about the work** each one does* in caring for patients?

Cancer specialists	Nothing	Little	Some	A lot	Everything
Nurses	Nothing	Little	Some	A lot	Everything

Allied healthcare professionals	Nothing	Little	Some	A lot	Everything

6. How much do they ***respect the work*** *that other team members do* in caring for patients?

Cancer specialists	Not at all	A little	Somewhat	A lot	Completely
Nurses	Not at all	A little	Somewhat	A lot	Completely
Allied healthcare professionals	Not at all	A little	Somewhat	A lot	Completely

7. How much do they ***share goals for the care*** of patients?

Cancer specialists	Not at all	A little	Somewhat	A lot	Completely
Nurses	Not at all	A little	Somewhat	A lot	Completely
Allied healthcare professionals	Not at all	A little	Somewhat	A lot	Completely

Sociodemographic questionnaire (At T1)

1. Age (in years):______

2. What is your current gender identity?

- Woman
- Man
- Trans woman
- Trans man
- Gender queer/Gender non-conforming
- Other identity. Please specify: __________________

2. What sex were you assigned at birth, meaning on your original birth certificate?

- Male
- Female

3. What language do you speak most often at home?

- French
- English
- Other
- Please specify: _____________

4. Please choose the group with which you identify most:

- Aboriginal (Inuit, Métis, North American Indian)
- Arab/West Asian (e.g., Armenian, Egyptian, Iranian, Lebanese, Moroccan)

- Black (e.g., African, Haitian, Jamaican, Somali)
- Chinese
- Filipino
- Japanese
- Korean
- Latin American
- South Asian
- South East Asian
- White (Caucasian)
- More than one group
- Other group
- Please specify:________________
- Prefer to not answer

5. Highest level of education completed

- Elementary school
- High school diploma or equivalent
- Technical, vocational school, or pre-university degree
- University (undergraduate: bachelor)
- Professional degree (medical degree, law school, etc.)
- Master's degree
- Doctoral degree
- Post Doctorate
- Other
- Please specify: ________________

6. What is your current status?

- Married/common law (two people living together but not married to each other)
- Single (never legally married)
- Widowed
- Separated/divorced

7. Do you presently live with someone?

- Yes
- No

8. Do you have children?

- Yes
- No

9. How many children do you have? ______

10. How many dependent children (under the age of 18) live with you?______

11. What is your total family income from all sources before taxes last year?
- Less than $20,000
- $20,000 - $39,999
- $40,000-$59,999
- $60,000-$79,999
- $80,000- $99,999
- More than $100,000
- Prefer to not answer

12. Which of the following categories best describes your current work status?
- Full time in the paid work force (30 hours or more per week)
- Part time in the paid work force (less than 30 hours per week)
- Self employed
- Unemployed
- Disability/sick leave
- Homemaker/stay at home parent
- Retired – due to health issues
- Retired – not due to health issues
- Other.
- Please specify: ________

13. In which country were you born?
- Canada
- Other
- Please specify: ________

14. Among the people you know, can you discuss your worries or problems with some of them?
- Yes
- No
- If Yes, with how many individuals can you discuss problems with: _____

Medical history (At T1 of study)

1. Please identify your current cancer diagnosis?
- Breast Cancer
- Gynecologic Cancer

2. What is your current stage?
- Stage 0
- Stage I
- Stage II
- Stage III

- Stage IV
- I don’t know

3. When were you diagnosed? (*YYYY/MM*)_______

4. Are you **currently** receiving cancer treatment?
- Yes
- No

5. If yes, what kind of treatment are you currently receiving? Select all that apply.
- Chemotherapy (taken by mouth or injected)
- Radiation therapy
- Hormonal therapy
- Immunotherapy
- Targeted therapy
- Other
- Please specify__________

6. How long have you been on treatment for your current cancer?
   Number of months_______
7. Did you previously receive any kind of cancer treatment or procedures?
- Yes
- No

8. If yes, what kind(s) did you receive? Select all that apply.
- Surgery
- Chemotherapy (taken by mouth or injected)
- Radiation therapy
- Hormonal therapy
- Immunotherapy
- Targeted therapy
- None of the above
- Other
- Please specify__________

9. Have you been diagnosed with cancer **before this cancer diagnosis**?
- Yes
- No
- If Yes, what was your previous type of cancer? ______
- Date of your previous cancer diagnosis (YYYY/MM)______
- Did you receive treatment for the previous cancer at the Jewish General Hospital?
- Yes
- No

10. Do you have other health conditions?

- Yes
- No other health conditions
- If Yes, please specify________________

11. In general, how would you describe your health?

- Excellent
- Very good
- Good
- Fair
- Poor

Please rate the extent to which you disagree or agree (from 1 to 5) with the following statements.

Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	2	3	4	5

a. Healthcare professionals involved in my cancer care consider me as an inherent member/partner of their team
b. The knowledge I gained through my cancer experience is considered important to the cancer team

Note: If you are feeling in any way quite distressed after completing this questionnaire, please contact any of the support services below so that they can address your concerns.
-Psychosocial Oncology Dept. (JGH): (514) 340-8222 ext. 3223
-Suicide-Action Montreal (24hr Crisis Hot-Line for immediate assistance): 514-723-4000
-West Island Crisis Center (24hr Crisis Hot-Line for immediate assistance): 514-684-6160

PROFESSIONAL RESOURCES AVAILABLE FOR JGH PATIENTS
Jewish General Hospital Psychosocial Oncology Program 514-340-8222 ext. 3223 *Psychological assessment and treatment provided by psychologists and social workers*
Hope & Cope 514-340-8255 *Call for information about support groups, workshops, and other resources*
Department of Psychiatry 514-340-8222 ext. 4213 Psychiatric evaluation and services 514-340-8222 ext. 4213

Pastoral Counselling 514-340-8222 ext. 5677 *Multi-denominational pastoral services are available for support*
Social Service Department 514-340-8240 *Support during hospitalization and short-term follow-up*
Crisis Hotline numbers (tel-aide) Suicide-Action Montreal 514-723-4000 West Island Crisis Center 514-684-6160 *24hr Crisis Hot-Line for immediate assistance*

Questionnaires pour les patientes

Satisfaction des patientes a l'égards des soins en oncologie (Jean-Pierre et al., 2011) (à T1 et T2)

L'échelle a été adaptée avec des changements minimes pour refléter les interactions des patients avec les professionnels de la santé en cancérologie plutôt qu'avec les médecins généralistes

Veuillez sélectionner l'équipe responsable de vos soins en oncologie (s'il vous plait, faites une seule sélection) :

- Équipe de soins en cancer du sein
- Équipe de soins en cancer gynécologique

Nous nous intéressons à votre expérience des soins en oncologie que vous avez reçus **durant la COVID-19**. Veuillez indiquer dans quelle mesure vous êtes en désaccord (1) ou en accord (5) avec chaque énoncé ci-dessous.

Pas du tout d'accord	En désaccord	Neutre	D'accord	Tout à fait d'accord
1	2	3	4	5

1. J'ai senti que l'on comprenait mes problèmes de santé.
2. Je me suis sentie traitée avec politesse et respect.
3. J'ai senti qu'on m'incluait dans les décisions concernant mon cancer.
4. On m'a expliqué comment prendre soin de moi.
5. Je me suis sentie encouragée à parler de mes problèmes de santé personnels.
6. J'ai senti que j'avais assez de temps avec mon oncologue.
7. On a répondu de façon satisfaisante à mes questions.
8. La prise des rendez-vous était facile.

9. J’étais toujours au courant de la prochaine étape dans mes soins en oncologie.
10. J’ai confiance dans ma façon d’aborder le système de soins de santé.
11. J’ai pu obtenir le conseil dont j’avais besoin concernant mes questions liées au cancer.
12. Je savais avec qui communiquer lorsque j’avais une question.
13. J’ai reçu tous les services dont j’avais besoin.
14. Je suis satisfaite de tous les soins en oncologie que j’ai reçus (ou que je reçois actuellement).
15. Les prestataires de soins de santé semblent avoir bien communiqué entre eux relativement à mes soins en oncologie.
16. J’ai reçu d’excellents soins en oncologie de mon oncologue.
17. J’ai reçu d’excellents soins des autres prestataires de soins participant à la prestation de mes soins en oncologie.
18. Les résultats de mes tests ont été communiqués à mon oncologue

Perceptions de l’efficacité de l’équipe de soins (Kilpatrick et al., 2019) (à T1 et T2)
L'échelle a été adaptée avec des changements minimes pour refléter l'équipe de soins en oncologie plutôt qu'une équipe de soins de santé générale
Les énoncés suivants portent sur vos perceptions de la façon dont les prestataires de soins de santé en oncologie travaillent en équipe. Veuillez évaluer dans quelle mesure vous êtes en désaccord (1) ou en accord (6) avec chacun des énoncés sur l’efficacité de l’équipe **durant la COVID-19**

Fortement en désaccord	En Désaccord	Un peu en désaccord	Un peu en accord	En accord	Fortement en accord
1	2	3	4	5	6

1. Les rôles des membres de l’équipe de soins en oncologie sont bien définis
2. Je suis content(e) de la manière dont le travail est divisé entre les membres de l’équipe de soins en oncologie
3. J’ai un rôle à jouer dans l’équipe de soins en oncologie
4. Ma contribution est valorisée par l’équipe de soins en oncologie
5. J’ai confiance à tous les membres de l’équipe de soins en oncologie
6. Mon équipe de soins est efficace à fournir des soins en oncologie
7. Les membres de l’équipe de soins en oncologie partagent les informations nécessaires pour m’aider à prendre des décisions sur mes soins de santé
8. Les membres de l’équipe de soins en oncologie connaissent mes objectifs de soins
9. Les résultats d’examen et les consultations sont à jour dans mon dossier
10. L’échange d’information entre les membres de l’équipe, les patients, la famille et les proches est **restreint (limité)**
11. Les membres de l’équipe travaillent ensemble pour régler des questions portant sur mes soins en oncologie
12. Je sais quelles seront les prochaines étapes de mes soins de santé
13. L’équipe de soins en oncologie ajuste les traitements face aux changements dans ma condition de santé

14. Mes idées, informations ou observations sont prises en compte par les membres de l'équipe de soins en oncologie
15. Les différences d'opinion parmi les membres de l'équipe sont respectées
16. Les membres de l'équipe de soins **<u>ne travaillent pas</u>** avec les familles ou les proches pour régler des questions portant sur les soins
17. Mes soins contre le cancer sont bien organisés
18. Les soins de santé sont offerts dans un délai convenable
19. J'ai accès facilement à un Professional de soins en oncologie qui peut prescrire des examens et/ou des médicaments
20. Les complications potentielles ou réelles sont gérées rapidement par l'équipe
21. Je retourne à la maison **<u>avec des questionnements</u>** sur ma médication
22. Toutes les informations pertinentes sont disponibles à l'équipe de soins si je dois consulter un autre intervenant ou changer de service
23. Je retourne à la maison avec toutes les questions sur mes soins de santé répondues
24. Les membres de l'équipe possèdent les connaissances approfondies et l'expertise nécessaires pour prodiguer les soins de santé

<u>Coordination Relationnelle</u> (Gittell et al., 2000) (T1 et T2 de l'étude)

L'échelle a été adaptée pour être utilisée avec des changements minimes afin de refléter les perceptions des patients à l'égard de la communication et les relations entre les membres de l'équipe

- *Les spécialistes du cancer comprennent les oncologues médicaux, les chirurgiens et chirurgiennes oncologues et les radio-oncologues)*
- *Le personnel infirmier comprend les infirmiers et infirmières en chef, les infirmiers et infirmières-pivots, les infirmières et infirmiers praticiens spécialisés, et les infirmiers et infirmières en oncologie.*
- *Les prestataires de soins paramédicaux comprennent les généticiens, nutritionnistes, les physiothérapeutes, les ergothérapeutes, les psychologues et les travailleuses et travailleurs sociaux.*

Veuillez répondre aux questions suivantes sur la communication et les relations entre les membres de l'équipe **<u>durant la COVID-19.</u>**

1. À votre avis, à quelle ***fréquence*** les membres de ces groupes communiquent-ils entre eux concernant la situation des patientes?

Spécialistes du cancer	Jamais	Rarement	Occasionnellement	Souvent	Constamment
Personnel infirmier	Jamais	Rarement	Occasionnellement	Souvent	Constamment
Prestataires de soins paramédicaux	Jamais	Rarement	Occasionnellement	Souvent	Constamment

2. À votre avis, est-ce qu'ils communiquent entre eux ***en temps opportun*** concernant la situation des patientes?

Spécialistes du cancer	Jamais	Rarement	Occasionnellement	Souvent	Toujours
Personnel infirmier	Jamais	Rarement	Occasionnellement	Souvent	Toujours
Prestataires de soins paramédicaux	Jamais	Rarement	Occasionnellement	Souvent	Toujours

3. À votre avis, est-ce qu'ils communiquent entre eux ***adéquatement*** concernant la situation des patientes?

Spécialistes du cancer	Jamais	Rarement	Occasionnellement	Souvent	Toujours
Personnel infirmier	Jamais	Rarement	Occasionnellement	Souvent	Toujours
Prestataires de soins paramédicaux	Jamais	Rarement	Occasionnellement	Souvent	Toujours

4. À votre avis, lorsque des problèmes surviennent dans les soins prodigués aux patientes, est-ce qu'ils ***travaillent*** *les uns avec les autres* pour régler le problème?

Spécialistes du cancer	Jamais	Rarement	Occasionnellement	Souvent	Toujours
Personnel infirmier	Jamais	Rarement	Occasionnellement	Souvent	Toujours
Prestataires de soins paramédicaux	Jamais	Rarement	Occasionnellement	Souvent	Toujours

5. À votre avis, qu'est-ce que les membres de ces groupes ***connaissent du travail*** *que chacun contribue* aux soins des patientes?

Spécialistes du cancer	Rien	Peu	Un peu	Beaucoup	Tout
Personnel infirmier	Rien	Peu	Un peu	Beaucoup	Tout
Prestataires de soins paramédicaux	Rien	Peu	Un peu	Beaucoup	Tout

6. Dans quelle mesure les membres de ces groupes ***respectent-ils le travail*** consacré aux soins des patientes *par les autres membres de l'équipe*?

Spécialistes du cancer	Pas du tout	Un peu	Moyennement	Beaucoup	Complètement
Personnel infirmier	Pas du tout	Un peu	Moyennement	Beaucoup	Complètement

Prestataires de soins paramédicaux	Pas du tout	Un peu	Moyennement	Beaucoup	Complètement

7. Dans quelle mesure les membres de ces groupes ***partagent-ils les objectifs de soins*** des patientes?

Spécialistes du cancer	Pas du tout	Un peu	Moyennement	Beaucoup	Complètement
Personnel infirmier	Pas du tout	Un peu	Moyennement	Beaucoup	Complètement
Prestataires de soins paramédicaux	Pas du tout	Un peu	Moyennement	Beaucoup	Complètement

Questions sociodémographiques (At T1 of study)

1. Quel âge avez-vous? (en année)
2. Je m'identifie comme
- Femme
- Homme
- Femme trans
- Homme trans
- Genre queer/genre non conforme
- Autre. Veuillez specifier: __________________

3. Quel sexe vous a été attribué à la naissance ? c'est-à-dire sur votre certificat de naissance original
- Femme
- Homme

4. Quelle langue parlez-vous le plus souvent à la maison?
- Francais
- Anglais
- Autre
- Precisez: _____________

5. Veuillez indiquer à quel groupe vous vous identifiez le plus:
- Autochtones (Inuit, Métis, Indien d'Amérique du Nord)
- Arabe/Asiatique de l'est (ex: Arménien, Égyptien, Iranien, Libanais, Marocain)
- Noir (ex: Africain, Haïtien, Jamaïcain, Somalien)
- Chinois
- Philippine
- Japonais
- Coréen

- Latino-Américain
- Sud-Asiatique
- Sud-Est-Asiatique
- Blanc (Caucasien)
- Plus d’un groupe
- Autre groupe. Veuillez spécifier: ________
- Prefere ne pas repondre

6. Quel est le niveau de scolarité le plus élevé que vous ayez atteint?

- École primaire
- École secondaire ou équivalent
- École technique, professionnelle ou diplôme préuniversitaire
- Université (bac)
- Diplôme professionnel
- Maîtrise
- Doctorat
- Diplôme postdoctoral
- Autre. Precisez _________________

7. Quel est votre état civil actuel?

- Marié(e) ou Relation de fait
- Célibataire
- Veuf(ve)
- Séparé(e) / Divorcé(e)

8. Habitez-vous actuellement avec quelqu'un?
9. Oui
10. Non

11. Avez-vous des enfants?

- Oui
- Non

12. Si oui, combien? ______

13. Si oui, combien d'enfants de moins de 18 ans ou d'enfants à charge vivent avec vous? ______

14. Pouvez-vous fournir votre meilleure estimation du revenu total de votre famille l'année dernière de toutes sources, avant impôts?

- Moins de 20 000 $
- 20 000 $ - 39 999 $
- 40 000 $ - 59 999 $
- 60 000 $ - 79 999 $

- $80,000- $99,999
- Plus que $100,000
- Je préfère ne pas répondre

15. Laquelle des catégories suivantes décrivent le mieux votre statut professionnel actuel?
- Temps plein sur le marché du travail rémunéré (30 heures ou plus par semaine)
- Temps partiel sur le marché du travail rémunérée (moins de 30 heures par semaine)
- Travailleur(e) indépendant(e)
- Sans emploi
- Invalidité ou congé de maladie
- Personne au foyer, parent à la maison
- Retraité(e) en raison de problèmes de santé
- Retraité(e) non en raison de problèmes de santé
- Autre. Veuillez préciser________

16. Dans quel pays êtes-vous né(e)?
- Canada
- Autre. Veuillez préciser

17. Parmi les personnes que vous connaissez, pouvez-vous discuter de vos inquiétudes ou de vos problèmes avec certaines d'entre elles?
- Oui
- Si oui, avec combien de personnes?
- Non

Antécédents médicaux (à T1)

1. Veuillez identifier votre diagnostic actuel de cancer
- Cancer du sein
- Cancer Gynecologique

2. Quel est le stade de votre cancer?
- Stage 0
- Stage I
- Stage II
- Stage III
- Stage IV
- Je ne sais pas

3. Date de votre diagnostic? (*YYYY/MM*)_______

4. Recevez-vous **actuellement** un traitement contre le cancer?
- Oui
- Non

5. Si oui, quel(s) type(s) de traitement contre le cancer vous recevez actuellement? Sélectionnez toutes les options qui s'appliquent

- Chimiothérapie (par voie orale ou injecté dans vos veines
- Radiothérapie
- Thérapie hormonale
- Immunothérapie
- Thérapie ciblée
- Autre
- Veuillez precisez__________

6. Depuis combien de temps recevez-vous un traitement pour votre diagnostic actuel de cancer?

Nombre de mois_______

7. Avez-vous déjà reçu un traitement contre le cancer?

- Oui
- Non

8. Si oui, quel(s) type(s) de traitement avez-vous reçu avant? Sélectionnez toutes les options qui s'appliquent

- Chirurgie
- Chimiothérapie (par voie orale ou injecté dans vos veines
- Radiothérapie
- Thérapie hormonale
- Immunothérapie
- Thérapie ciblée
- Aucun
- Autre. Veuillez precisez__________

9. Avez-vous déjà reçu un diagnostic de cancer avant ce diagnostic actuel?

- Oui
- Non
- Si oui, quel type de cancer avez-vous? ______
- Date du diagnostic (YYYY/MM)______
- Avez-vous reçu un traitement pour le type de cancer précédent à l'hôpital général juif?
- Oui
- Non

10. Avez-vous autres conditions de santé actuelles?

- Oui
- Non
- Si oui. Veuillez precisez_______________

11. En général, comment décririez-vous votre état de santé?
- Excellent
- Très bon
- Bon
- Acceptable
- Pauvre

Veuillez indiquer dans quelle mesure vous êtes d'accord ou en désaccord (de 1 à 5) avec chacun des énoncés suivants.

Pas du tout d'accord	En désaccord	Neutre	D'accord	Tout à fait d'accord
1	2	3	4	5

- Les prestataires de mes soins en oncologie me considèrent comme une membre ou une partenaire à part entière de leur équipe.
- Les connaissances que j'ai acquises par mon expérience du cancer sont considérées importantes par l'équipe de soins en oncologie.

Remarque : Si vous vous sentez en détresse à la suite de ces questionnaires, veuillez contacter notre équipe de recherche pour vous diriger vers les ressources appropriées.
Courriel : **Loiselle.Lab.ccomtl@ssss.gouv.qc.ca**
Téléphone : 514-398-8977
Vous pouvez aussi contacter les services ci-dessous

RESSOURCES PROFESSIONNELLES DISPONIBLES POUR LES PATIENTS
Hôpital général juif *Programme d'oncologie psychosociale 514-340-8222 ext. 3223* *Support psychologique et références pour travailleuses et travailleurs sociaux*
Hôpital général juif L'espoir, c'est la vie 514-340-8255 Appelez pour une liste de groupes de soutien, d'ateliers et d'autres ressources
Hôpital général juif Département de psychiatrie 514-340-8222 ext. 4213 Évaluation et services psychiatriques 514-340-8222 ext. 4213
Conseil pastoral 514-340-8222 ext. 5677 Des services pastoraux multi-confessionnels sont disponibles pour des conseils de soutien
Hôpital général juif Département des services sociaux 514-340-8240 Accompagnement pendant l'hospitalisation et suivi à court terme

Suicide Action Montréal (ligne d'appel 24-heures pour assistance immédiate) :
(514) 723-4000
Centre de Crise de l'Ouest de l'île (ligne d'appel 24-heures pour assistance immédiate) :
(514) 684-6160

<u>Healthcare professionals' questionnaires</u>

<u>HCPs perceptions of Team effectiveness (Kilpatrick et al., 2019)(At T1 and T2)</u>

The scale was adapted with minimal changes to reflect the cancer care team rather than a general healthcare team

Please indicate the cancer clinic you work in (If you work with both clinics, please select only the one you are providing feedback on):

- Breast cancer clinic
- Gynecologic cancer clinic

The following statements are about your perceptions of how your cancer team members work together. More specifically, please respond to the following statements (from 1 to 6) about the effectiveness of your team during COVID-19.

Strongly disagree	Disagree	Disagree somewhat	Agree somewhat	Agree	Strongly agree
1	2	3	4	5	6

List of statements

1. The roles of cancer care team members are well-defined
2. I am happy with the way work is divided among members of the cancer care team
3. I have a role to play in the team
4. I trust other members of the cancer care team
5. My cancer care team is effective to provide patient care
6. Team members share relevant information to inform patient care decisions
7. Regular interprofessional team meetings are scheduled to plan patient care
8. Cancer care team members know the goals of patients' plans of care
9. The patient's health record is updated as required
10. The flow of information between team members and patients and families is constrained (limited)
11. Team members work together to solve patient care issues
12. The cancer care team meets as needed to address complex care issues that arise
13. My contributions are valued by my team
14. My ideas, information or observations are used to solve patient care issues
15. Disagreements among team members are dealt with fairly by team members
16. Differences of opinion among team members are respected
17. Working with families to solve patient care issues is not part of the team's mandate

18. The cancer care team adjusts treatments according to changes in the patient's condition
19. The care provided by the cancer care team is well organized
20. Patient care is delivered in a timely manner
21. The cancer care team can easily access a provider who can order tests or medication
22. Potential or actual patient complications are dealt with quickly by the team
23. Patients return home with as many unanswered questions about their medication
24. Patient transfers to other care facilities include all relevant patient information
25. Patients return home with all their questions answered about their care
26. Members of the cancer care team possess in-depth knowledge and the skills required to provide care

<u>Relational Coordination (Gittell et al., 2000) (At T1 and T2)</u>

The following asks about communication and relationships among members of your cancer team (i.e., cancer specialists, nurses and other allied healthcare professionals)

- *Cancer specialists include medical, surgical and radiation oncologists*
- *Nurses include head nurses, nurse navigators (nurse pivot), nurse practitioners and oncology nurses*
- *Allied healthcare professionals include geneticists, nutritionists, physiotherapists, occupational therapists, psychiatrists, psychologists, and social workers*

Please respond to the following questions about communication and relationships of your team during COVID-19.

1. In your opinion, how *frequently* do your cancer care team members communicate with each other about patients?

Cancer specialists	Never	Rarely	Occasionally	Often	Constantly
Nurses	Never	Rarely	Occasionally	Often	Constantly
Allied healthcare professionals	Never	Rarely	Occasionally	Often	Constantly

2. In your opinion, do they communicate with each other in a *timely* way about patients?

Cancer specialists	Never	Rarely	Occasionally	Often	Always
Nurses	Never	Rarely	Occasionally	Often	Always
Allied healthcare professionals	Never	Rarely	Occasionally	Often	Always

3. In your opinion, do they communicate with each other *accurately* about patients?

Cancer specialists	Never	Rarely	Occasionally	Often	Always
Nurses	Never	Rarely	Occasionally	Often	Always
Allied healthcare professionals	Never	Rarely	Occasionally	Often	Always

4. In your opinion, when problems arise regarding the care of patients, do they *work with you* to solve the problem?

Cancer specialists	Never	Rarely	Occasionally	Often	Always
Nurses	Never	Rarely	Occasionally	Often	Always
Allied healthcare professionals	Never	Rarely	Occasionally	Often	Always

5. In your opinion, how much do they *know about the work you do* in caring for patients?

Cancer specialists	Nothing	Little	Some	A lot	Everything
Nurses	Nothing	Little	Some	A lot	Everything
Allied healthcare professionals	Nothing	Little	Some	A lot	Everything

6. In your opinion, how much do they *respect the work you do* in caring for patients?

Cancer specialists	Not at all	A little	Somewhat	A lot	Completely
Nurses	Not at all	A little	Somewhat	A lot	Completely
Allied healthcare professionals	Not at all	A little	Somewhat	A lot	Completely

7. In your opinion, how much do they *share your goals for the care* of patients?

Cancer specialists	Not at all	A little	Somewhat	A lot	Completely
Nurses	Not at all	A little	Somewhat	A lot	Completely
Allied healthcare professionals	Not at all	A little	Somewhat	A lot	Completely

Sociodemographic questionnaire (At T1)

1. Age (in years):________

2. To which gender you do you most identify?
- Male
- Female
- Transgender male
- Transgender female
- Non-binary
- Gender queer
- Prefer not to answer
- Other identity. Please specify: ________________

3. What sex were you assigned at birth, meaning on your original birth certificate?
- Male
- Female

4. What language do you speak most often at home?
- French
- English
- Other
- Please specify: ___________

5. Please choose the group with which you most identify most:
- Aboriginal (Inuit, Métis, North American Indian)
- Arab/West Asian (e.g., Armenian, Egyptian, Iranian, Lebanese, Moroccan)
- Black (e.g., African, Haitian, Jamaican, Somali)
- Chinese
- Filipino
- Japanese
- Korean
- Latin American
- South Asian
- South East Asian
- White (Caucasian)
- More than one group
- Another group
- Please specify: ______________
- Prefer to not answer

6. Highest level of education completed
- Elementary school
- High school diploma or equivalent
- Technical, vocational school, or pre-university degree
- University (undergraduate: bachelor)
- Professional degree (medical degree, law school, etc.)

- Master’s degree
- Doctoral degree
- Post Doctorate
- Other
- Please specify: ________________

7. What is your current status?

- Married/common law (two people living together but not married to each other)
- Single (never legally married)
- Widowed
- Separated/divorced

8. What is your total family income from all sources before taxes last year?

- Less than $20,000
- $20,000 - $39,999
- $40,000-$59,999
- $60,000-$79,999
- $80,000- $99,999
- More than $100,000
- Prefer to not answer

Work history (At T1)

1. Which of the following categories best describes your current work status?

- Full time in the paid work force (30 hours or more per week)
- Part time in the paid work force (less than 30 hours per week)
- Other. Please specify: ________

2. Please select the option that best describes your professional group or position:

- Cancer specialist (e.g., medical, surgical or radiation oncologists)
- Nurse (e.g., head nurse, nurse navigator (nurse pivot), nurse practitioner or oncology nurse)
- Allied healthcare professionals (e.g., geneticist, nutritionist, physiotherapist, occupational therapist, psychiatrist, psychologist, or social worker)

3. For how long have you been licensed or registered with your profession?

Number of years ___
If less than a year, number of months ___

4. For how long you have been working in your current professional role in this organization?

Number of years _______
If less than a year, number of months ___

5. How long have you been working with this cancer team?

Number of years _______

If less than a year, number of months ___ _

<u>Questionnaires pour les prestataires de soins de santé en oncologie</u>

<u>Perceptions de l'efficacité de l'équipe de soins (</u>Kilpatrick et al., 2019) (à T1 et T2)

Veuillez indiquer à quelle clinique du cancer vous travaillez. (Si vous travaillez aux deux, veuillez en sélectionner seulement une sur laquelle vos commentaires porteront)

- Clinique du cancer du sein
- Clinique du cancer gynécologique

Les questions suivantes portent sur la façon dont les prestataires de soins de santé travaillent en équipe. Veuillez évaluer dans quelle mesure vous êtes en désaccord ou en accord (de 1 à 6) avec chacun des énoncés ci-dessous portant sur l'efficacité de votre équipe <u>pendant la COVID-19.</u>

Fortement en désaccord	En Désaccord	Un peu en désaccord	Un peu en accord	En accord	Fortement en accord
1	2	3	4	5	6

1. Les rôles des membres de l'équipe de soins en oncologie sont bien définis
2. Je suis content(e) de la manière dont le travail est divisé entre les membres de l'équipe
3. J'ai un rôle à jouer dans l'équipe de soins en oncologie
4. J'ai confiance aux membres de l'équipe de soins en oncologie
5. Mon équipe de soins en oncologie est efficace à fournir des soins de santé
6. Les membres de l'équipe de soins partagent les informations nécessaires pour que les patientes et leurs familles prennent des décisions sur les soins de santé
7. Des rencontres d'équipes interprofessionnelles sont prévues régulièrement pour planifier les soins des patientes
8. Les membres de l'équipe de soins connaissent les objectifs de soins en oncologie des patientes
9. Les résultats d'examen et les consultations sont à jour dans le dossier de la patiente
10. L'échange d'information entre les membres de l'équipe, les patientes et les familles est **restreint (limité)**
11. Les membres de l'équipe travaillent ensemble pour solutionner les problèmes rencontrés
12. L'équipe de soins en oncologie se rencontre selon les besoins pour aborder des problématiques de soins complexes
13. Ma contribution est valorisée par l'équipe de soins
14. Mes idées, informations ou observations sont prises en compte par les membres de l'équipe
15. Les désaccords entre les membres de l'équipe sont traités équitablement
16. Les différences d'opinion parmi les membres de l'équipe sont respectées
17. Les membres de l'équipe de soins **<u>ne travaillent pas</u>** avec les familles pour régler des questions portant sur les soins

18. L’équipe de soins en oncologie ajuste les traitements face aux changements dans la condition de santé de la patiente
19. Les soins prodigués par l’équipe de soins sont bien organisés
20. Les soins de santé sont offerts dans un délai convenable
21. Les membres de l’équipe de soins en oncologie ont accès facilement à un intervenant qui peut prescrire des examens ou des médicaments
22. Les complications potentielles ou réelles sont gérées rapidement par l’équipe
23. La patiente retourne à la maison avec des questions **non répondues** sur sa medication
24. Toutes les informations pertinentes sont disponibles à l’équipe de soins lorsque la patiente est transférée dans un autre établissement
25. La patiente retourne à la maison avec toutes les questions sur les soins de santé répondues
26. Les membres de l’équipe possèdent les connaissances approfondies et l’expertise nécessaires pour prodiguer les soins de santé

Coordination Relationnelle (Gittell et al., 2000) (à T1 et T2)

Les questions suivantes portent sur la communication et les relations entre les membres de l’équipe de soins

- *Les spécialistes du cancer comprennent les oncologues médicaux, les chirurgiens et chirurgiennes oncologues et les radio-oncologues.*
- *Le personnel infirmier comprend les infirmiers et infirmières en chef, les infirmiers et infirmières-pivots, les infirmières et infirmiers praticiens spécialisés, et les infirmiers et infirmières en oncologie.*
- *Les prestataires de soins paramédicaux comprennent les généticiens, les nutritionnistes, les physiothérapeutes, les ergothérapeutes, les psychologues et les travailleuses et travailleurs sociaux.*

Veuillez répondre aux questions suivantes sur la communication et les relations entre les membres de l’équipe **durant la COVID-19.**

1. À quelle ***fréquence*** les prestataires de soins de santé de ces groupes communiquent-ils ***avec vous*** à propos des patientes?

Spécialistes du cancer	Jamais	Rarement	Occasionnellement	Souvent	Constamment
Personnel infirmier	Jamais	Rarement	Occasionnellement	Souvent	Constamment
Prestataires de soins paramédicaux	Jamais	Rarement	Occasionnellement	Souvent	Constamment

2. Est-ce qu’ils communiquent ***avec vous*** en ***temps opportun*** concernant les patientes?

Spécialistes du cancer	Jamais	Rarement	Occasionnellement	Souvent	Toujours
Personnel infirmier	Jamais	Rarement	Occasionnellement	Souvent	Toujours
Prestataires de soins paramédicaux	Jamais	Rarement	Occasionnellement	Souvent	Toujours

3. Est-ce qu'ils communiquent avec vous ***adéquatement*** la situation des patientes?

Spécialistes du cancer	Jamais	Rarement	Occasionnellement	Souvent	Toujours
Personnel infirmier	Jamais	Rarement	Occasionnellement	Souvent	Toujours
Prestataires de soins paramédicaux	Jamais	Rarement	Occasionnellement	Souvent	Toujours

4. Lorsqu'il y a des problèmes dans les soins fournis aux patientes, est-ce que les prestataires des soins de santé de ces groupes ***travaillent avec vous*** pour régler le problème?

Spécialistes du cancer	Jamais	Rarement	Occasionnellement	Souvent	Toujours
Personnel infirmier	Jamais	Rarement	Occasionnellement	Souvent	Toujours
Prestataires de soins paramédicaux	Jamais	Rarement	Occasionnellement	Souvent	Toujours

5. Dans quelle mesure *connaissent-ils* ***le travail que vous faites*** auprès des patientes?

Spécialistes du cancer	Rien	Peu	Un peu	Beaucoup	Tout
Personnel infirmier	Rien	Peu	Un peu	Beaucoup	Tout
Prestataires de soins paramédicaux	Rien	Peu	Un peu	Beaucoup	Tout

6. Dans quelle mesure ***respectent-ils le travail que vous faites*** auprès des patientes?

Spécialistes du cancer	Pas du tout	Un peu	Moyennement	Beaucoup	Complètement
Personnel infirmier	Pas du tout	Un peu	Moyennement	Beaucoup	Complètement

Prestataires de soins paramédicaux	Pas du tout	Un peu	Moyennement	Beaucoup	Complètement

7. Dans quelle mesure ***partagent-ils vos objectifs de soins*** des patientes?

Spécialistes du cancer	Pas du tout	Un peu	Moyennement	Beaucoup	Complètement
Personnel infirmier	Pas du tout	Un peu	Moyennement	Beaucoup	Complètement
Prestataires de soins paramédicaux	Pas du tout	Un peu	Moyennement	Beaucoup	Complètement

Questions Sociodémographiques (à T1)

1. Quel âge avez-vous? (en année)
2. Je m'identifie comme

- Femme
- Homme
- Femme trans
- Homme trans
- Genre queer/genre non conforme
- Autre. Veuillez specifier: ___________________

3. Quel sexe vous a été attribué à la naissance ? c'est-à-dire sur votre certificat de naissance original

- Femme
- Homme

4. Quelle langue parlez-vous le plus souvent à la maison?

- Francais
- Anglais
- Autre
- Precisez: _____________

5. Veuillez indiquer à quel groupe vous vous identifiez le plus:

- Autochtones (Inuit, Métis, Indien d'Amérique du Nord)
- Arabe/Asiatique de l'est (ex: Arménien, Égyptien, Iranien, Libanais, Marocain)
- Noir (ex: Africain, Haïtien, Jamaïcain, Somalien)
- Chinois

- Philippin
- Japonais
- Coréen
- Latino-Américain
- Sud-Asiatique
- Sud-Est-Asiatique
- Blanc (Caucasien)
- Plus d'un groupe
- Autre groupe. Veuillez spécifier: ________

6. Quel est le niveau de scolarité le plus élevé que vous ayez atteint?

- École primaire
- École secondaire ou équivalent
- École technique, professionnelle ou diplôme préuniversitaire
- Université (bac)
- Diplôme professionnel
- Maîtrise
- Doctorat
- Diplôme postdoctoral
- Autre. Precisez ________________

7. Quel est votre état civil actuel?

- Marié(e) ou Relation de fait
- Célibataire
- Veuf(ve)
- Séparé(e) / Divorcé(e)

8. Pouvez-vous fournir votre meilleure estimation du revenu total de votre famille l'année dernière de toutes sources, avant impôts?

- Moins de 20 000 $
- 20 000 $ - 39 999 $
- 40 000 $ - 59 999 $
- 60 000 $ - 79 999 $
- $80,000- $99,999
- Plus que $100,000
- Prefer not to answer

Travail (à T1)

1. Quelle catégorie parmi les suivantes décrit le mieux votre situation de travail actuelle?

- À plein temps dans la main-d'œuvre rémunérée (30 heures ou plus par semaine)
- À temps partiel dans la main-d'œuvre rémunérée (moins de 30 heures par semaine)
- Autre. Veuillez préciser: ________

2. Veuillez sélectionner l’option qui décrit le mieux votre groupe ou poste professionnel :
- Spécialistes du cancer (p. ex., oncologue médical, chirurgien ou chirurgienne oncologue, radio-oncologue)
- Personnel infirmier (p. ex., infirmier ou infirmière en chef, infirmier ou infirmière-pivot, infirmière ou infirmier praticien spécialisé, infirmier ou infirmière en oncologie)
- Prestataires de soins paramédicaux (p. ex., nutritionniste, physiothérapeute, ergothérapeute, psychologue, travailleuse ou travailleur social)

3. Depuis combien de temps êtes-vous autorisé à exercer votre profession?

Nombre d’années ___
Si moins d’un an : nombre de mois ___

4. Depuis combien de temps occupez-vous votre poste actuel dans cet établissement?

Nombre d’années _______
Si moins d’un an : nombre de mois ___

5. Depuis combien de temps travaillez-vous avec cette équipe en oncologie?

Nombre d’années _______
Si moins d’un an : nombre de mois ___

Caregivers’ questionnaires

Perceptions of Team Effectiveness: (Kilpatrick et al, 2019) (At T1 and T2)

Which cancer team is following the person you are caring for:
- Breast Cancer team
- Gynecologic Cancer team

The following statements are about how cancer care teams work together. Please indicate the extent to which you disagree (1) or agree (6) with each statement below about the cancer team effectiveness during COVID-19

Strongly disagree	Disagree	Disagree somewhat	Agree somewhat	Agree	Strongly agree
1	2	3	4	5	6

1. The roles of members of the cancer care team are well-defined
2. I am happy with the way work is divided among members of the cancer care team
3. I have a role to play in the cancer care team
4. My contribution is valued by members of the cancer care team
5. I trust all the members of the cancer care team
6. My cancer care team is effective to in providing cancer care

7. Team members share relevant information to help me make decisions about patient cancer care
8. Cancer care team members know the goals of the patients' plan of care
9. The test results and consultations are updated in the patient's chart
10. The flow of information between team members, patients, friends and families is constrained (limited)
11. Team members work together to solve cancer care issues
12. I am aware of the next steps in the plan of care
13. Cancer care team adjusts treatments according to changes in patient condition
14. My ideas, information or observations are valued by members of the cancer care team
15. Differences of opinions among team members are respected
16. Working with friends or families to solve patient care issues is not part of the team's mandate
17. Cancer care is well-organized
18. Patient care is delivered in a timely manner
19. I easily have access to cancer care professionals who order tests and/or medication
20. Potential or actual complications are dealt with quickly by the team
21. I return home with unanswered questions about patient medication
22. All relevant information is available from the cancer care team if the patient needs to consult another healthcare provider or is hospitalized on another unit
23. I return home with all my questions answered about the cancer care provided
24. Members of the cancer care team possess in-depth knowledge and the skills required to provide care

<u>Relational Coordination (Gittell et al., 2000) (At T1 and T2)</u>

The scale was adapted for use with minimal changes to reflect caregivers' perceptions of cancer team communication and relationships.

The following asks about communication and relationships in the cancer team following the among person you are caring for

- *Cancer specialists include medical, surgical and radiation oncologists*
- *Nurses include head nurses, nurse navigators (nurse pivot), nurse practitioners and oncology nurses*
- *Allied healthcare professionals include geneticists, nutritionists, physiotherapists, occupational therapists, psychiatrists, psychologists and social workers*

Please respond to the following questions about your cancer care team communication and relationships during COVID-19.

1. In your opinion, how *frequently* do cancer care team members communicate with each other about patients?

Cancer specialists	Never	Rarely	Occasionally	Often	Constantly
Nurses	Never	Rarely	Occasionally	Often	Constantly
Allied healthcare professionals	Never	Rarely	Occasionally	Often	Constantly

2. In your opinion, do they communicate with each other in a *timely* way about patients?

Cancer specialists	Never	Rarely	Occasionally	Often	Always
Nurses	Never	Rarely	Occasionally	Often	Always
Allied healthcare professionals	Never	Rarely	Occasionally	Often	Always

3. In your opinion, do they communicate with each other *accurately* about patients?

Cancer specialists	Never	Rarely	Occasionally	Often	Always
Nurses	Never	Rarely	Occasionally	Often	Always
Allied healthcare professionals	Never	Rarely	Occasionally	Often	Always

4. In your opinion, when problems arise regarding the care of patients, do they *work with each other* to solve the problem?

Cancer specialists	Never	Rarely	Occasionally	Often	Always
Nurses	Never	Rarely	Occasionally	Often	Always
Allied healthcare professionals	Never	Rarely	Occasionally	Often	Always

5. In your opinion, how much do they know *about the work each one does* in caring for patients?

Cancer specialists	Nothing	Little	Some	A lot	Everything
Nurses	Nothing	Little	Some	A lot	Everything
Allied healthcare professionals	Nothing	Little	Some	A lot	Everything

6. How much do they *respect the work that other team members do* in caring for patients?

Cancer specialists	Not at all	A little	Somewhat	A lot	Completely
Nurses	Not at all	A little	Somewhat	A lot	Completely
Allied healthcare professionals	Not at all	A little	Somewhat	A lot	Completely

7. How much do they *share goals for the care* of patients?

Cancer specialists	Not at all	A little	Somewhat	A lot	Completely
Nurses	Not at all	A little	Somewhat	A lot	Completely
Allied healthcare professionals	Not at all	A little	Somewhat	A lot	Completely

Socio-demographic questionnaire (At T1)

1. What is your age? _________

2. To which gender do you most identify?
- Male
- Female
- Transgender male
- Transgender female
- Non-binary
- Gender queer
- Prefer not to answer
- Other identity. Please specify: ___________________

3. What sex were you assigned at birth, meaning on your original birth certificate?
- Male
- Female

4. What language do you speak most often?
- French
- English
- Other. Please specify: _____________

5. Please choose the group with which you identify most:
- Aboriginal (Inuit, Métis, North American Indian)
- Arab/West Asian (e.g., Armenian, Egyptian, Iranian, Lebanese, Moroccan)
- Black (e.g., African, Haitian, Jamaican, Somali)
- Chinese
- Filipino
- Japanese
- Korean
- Latin American
- South Asian
- Southeast Asian
- White (Caucasian)
- More than one group
- Another group. Please specify: _________________

- Prefer to not answer

6. Highest level of education completed

- Elementary school
- High school diploma or equivalent
- Technical, vocational school, or pre-university degree
- University (undergraduate: bachelor)
- Professional degree (medical degree, law school, etc.)
- Master's degree
- Doctoral degree
- Post Doctorate
- Other. Please specify: _________________

7. What is your current status?

- Married/common law (two people living together but not married to each other)
- Single (never legally married)
- Widowed
- Separated/divorced

8. In which country were you born?

- Canada
- Other. Please specify: ______________

9. What is your total family income from all sources before taxes last year?

- Less than $20,000
- $20,000 - $39,999
- $40,000-$59,999
- $60,000-$79,999
- $80,000- $99,999
- More than $100,000
- Prefer to not answer

10. Which of the following categories best describes your current work status?

- Full time in the paid work force (30 hours or more per week)
- Part time in the paid work force (less than 30 hours per week)
- Self employed
- Unemployed
- Disability/sick leave
- Homemaker/stay at home parent
- Retired – due to health issues
- Retired – not due to health issues
- Other.
- Please specify: _________

Role and other questions

1. Based on the descriptions below, what is your relationship with the person with breast or gynecologic cancer you are caring for?
- I am a first degree relative (e.g., parent, sibling, or child)
- I am a second degree relative (e.g., grandparents, grandchildren, aunts, uncles, nephews, nieces, or half-siblings)
- I am her spouse/partner
- I am a friend
- Other. Please specify: ________

2. Which of the following categories best describe your current role(s) as a caregiver for this person (Choose all that apply)
- I provide emotional support (e.g., conversation, encouragement, active listening)
- I provide practical support (e.g., driving to appointments, household tasks, running errands, helping with personal care)
- I assist with care management (e.g., booking appointments, calling for follow-up, reviewing test results with her)
- Other. Please specify: ________

3. How long have you been a caregiver for this person? Year(s), Month(s), Days(s)

4. How long have you been a caregiver in general (e.g., taking care of others with medical issues, raising children, attending to an elderly relative)? Year(s), Month(s), Days(s)

5. Have you ever been diagnosed with cancer?
- Yes
- No
- If Yes, what was type of cancer did you have? ______
- If Yes, date of your diagnosis? (YYYY/MM) _______

6. Please rate the extent to which you disagree or agree (from 1 to 5) with each of the following statements.

Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	2	3	4	5

a. The cancer care team considers me an inherent member of their team
b. The knowledge I am gaining by being a caregiver is considered important to the cancer team

Note: If you are feeling in any way quite distressed after completing this questionnaire,

please contact the research team so that we can assist you and guide you to the appropriate resources.
E-mail: Loiselle.Lab.ccomtl@ssss.gouv.qc.ca
Phone: 514-398-8977

PROFESSIONAL RESOURCES AVAILABLE FOR CAREGIVERS
Jewish General Hospital Psychosocial Oncology Program 514-340-8222 ext. 3223 *Psychological support and referral to social workers*
Jewish General Hospital Hope and Cope 514-340-8255 *Support groups, phone bodies, and other programs such as Reiki, coping skills training, art…*
Suicide-Action Montreal (24hr Crisis Hot-Line for immediate assistance) *514-723-4000* *West Island Crisis Center (24hr Crisis Hot-Line for immediate assistance)* *514-684-6160*

Questionnaires des aidants naturels

Perceptions de l'efficacité de l'équipe de soins (Kilpatrick et al., 2019) (à T1 et T2)
L'échelle a été adaptée avec des changements minimes pour refléter l'équipe de soins en oncologie plutôt qu'une équipe de soins de santé générale
Veuillez sélectionner l'équipe sur laquelle portent vos commentaires (comme aidants naturels de la patiente)

- Équipe de soins en cancer du sein
- Équipe de soins en cancer gynécologique

Les questions suivantes portent sur la façon dont les prestataires de soins de santé qui participent à la prestation des soins en oncologie travaillent en équipe.
Veuillez évaluer dans quelle mesure vous êtes en désaccord ou en accord (de 1 à 6) avec chacun des énoncés ci-dessous portant sur l'efficacité de l'équipe durant la COVID-19.

Fortement en désaccord	En Désaccord	Un peu en désaccord	Un peu en accord	En accord	Fortement en accord
1	2	3	4	5	6

1. Les rôles des membres de l'équipe de soins en oncologie sont bien définis
2. Je suis content(e) de la manière dont le travail est divisé entre les membres de l'équipe de soins en oncologie
3. J'ai un rôle à jouer dans l'équipe de soins en oncologie

4. Ma contribution est valorisée par l'équipe de soins en oncologie
5. J'ai confiance à tous les membres de l'équipe de soins en oncologie
6. Mon équipe de soins est efficace à fournir des soins en oncologie
7. Les membres de l'équipe de soins en oncologie partagent les informations nécessaires pour m'aider à prendre des décisions sur les soins de santé de la patiente
8. Les membres de l'équipe de soins en oncologie connaissent les objectifs de soins
9. Les résultats d'examen et les consultations sont à jour dans le dossier de la patiente
10. L'échange d'information entre les membres de l'équipe, les patients, la famille et les proches est restreint (limité)
11. Les membres de l'équipe travaillent ensemble pour régler des questions portant sur les soins en oncologie
12. Je sais quelles seront les prochaines étapes des soins de santé
13. L'équipe de soins en oncologie ajuste les traitements face aux changements dans la condition de santé de la patiente
14. Mes idées, informations ou observations sont prises en compte par les membres de l'équipe de soins en oncologie
15. Les différences d'opinion parmi les membres de l'équipe sont respectées
16. Les membres de l'équipe de soins ne travaillent pas avec les familles ou les proches pour régler des questions portant sur les soins
17. Les soins contre le cancer sont bien organisés
18. Les soins de santé sont offerts dans un délai convenable
19. J'ai accès facilement aux professionnels de soins en oncologie qui peuvent prescrire des examens et/ou des médicaments
20. Les complications potentielles ou réelles sont gérées rapidement par l'équipe
21. Je retourne à la maison avec des questionnements sur la médication de patiente
22. Toutes les informations pertinentes sont disponibles à l'équipe de soins si la patiente doit consulter un autre intervenant ou changer de service
23. Je retourne à la maison avec toutes les questions sur les soins en oncologie répondues
24. Les membres de l'équipe possèdent les connaissances approfondies et l'expertise nécessaires pour prodiguer les soins de santé

Coordination Relationnelle (Gittell et al., 2000) (à T1 et T2)

L'échelle a été adaptée pour être utilisée avec des changements minimes afin de refléter les perceptions des aidants naturels à l'égard de la communication et les relations entre les membres de l'équipe

Les questions suivantes portent sur la communication et les relations entre les membres de l'équipe de soins

- *Les spécialistes du cancer comprennent les oncologues médicaux, les chirurgiens et chirurgiennes oncologues et les radio-oncologues)*
- *Le personnel infirmier comprend les infirmiers et infirmières en chef, les infirmiers et infirmières-pivots, les infirmières et infirmiers praticiens spécialisés, et les infirmiers et infirmières en oncologie.*

- *Les prestataires de soins paramédicaux comprennent les généticiens, nutritionnistes, les physiothérapeutes, les ergothérapeutes, les psychologues et les travailleuses et travailleurs sociaux.*

Veuillez répondre aux questions suivantes sur la communication et les relations entre les membres de l'équipe durant la COVID-19.

1. À votre avis, à quelle *fréquence* les membres de ces groupes communiquent-ils entre eux concernant la situation des patientes?

Spécialistes du cancer	Jamais	Rarement	Occasionnellement	Souvent	Constamment
Personnel infirmier	Jamais	Rarement	Occasionnellement	Souvent	Constamment
Prestataires de soins paramédicaux	Jamais	Rarement	Occasionnellement	Souvent	Constamment

2. À votre avis, est-ce qu'ils communiquent entre eux *en temps opportun* concernant la situation des patientes?

Spécialistes du cancer	Jamais	Rarement	Occasionnellement	Souvent	Toujours
Personnel infirmier	Jamais	Rarement	Occasionnellement	Souvent	Toujours
Prestataires de soins paramédicaux	Jamais	Rarement	Occasionnellement	Souvent	Toujours

3. À votre avis, est-ce qu'ils communiquent entre eux *adéquatement* concernant la situation des patientes?

Spécialistes du cancer	Jamais	Rarement	Occasionnellement	Souvent	Toujours
Personnel infirmier	Jamais	Rarement	Occasionnellement	Souvent	Toujours
Prestataires de soins paramédicaux	Jamais	Rarement	Occasionnellement	Souvent	Toujours

4. À votre avis, lorsque des problèmes surviennent dans les soins prodigués aux patientes, est-ce que les membres de ces groupes *travaillent les uns avec les autres* pour régler le problème?

Spécialistes du cancer	Jamais	Rarement	Occasionnellement	Souvent	Toujours

Personnel infirmier	Jamais	Rarement	Occasionnellement	Souvent	Toujours
Prestataires de soins paramédicaux	Jamais	Rarement	Occasionnellement	Souvent	Toujours

5. À votre avis, qu'est-ce que les membres de ces groupes *connaissent le travail que chacun contribue* aux soins des patientes?

Spécialistes du cancer	Rien	Peu	Un peu	Beaucoup	Tout
Personnel infirmier	Rien	Peu	Un peu	Beaucoup	Tout
Prestataires de soins paramédicaux	Rien	Peu	Un peu	Beaucoup	Tout

6. Dans quelle mesure *respectent-ils le travail* consacré au soin des patientes *par les autres membres de l'équipe*?

Spécialistes du cancer	Pas du tout	Un peu	Moyennement	Beaucoup	Complètement
Personnel infirmier	Pas du tout	Un peu	Moyennement	Beaucoup	Complètement
Prestataires de soins paramédicaux	Pas du tout	Un peu	Moyennement	Beaucoup	Complètement

7. Dans quelle mesure *partagent-ils les objectifs de soins* des patientes?

Spécialistes du cancer	Pas du tout	Un peu	Moyennement	Beaucoup	Complètement
Personnel infirmier	Pas du tout	Un peu	Moyennement	Beaucoup	Complètement
Prestataires de soins paramédicaux	Pas du tout	Un peu	Moyennement	Beaucoup	Complètement

Questions sociodémographiques (à T1)

1. Quel âge avez-vous? (en année)
2. Je m'identifie comme

- Femme
- Homme

- Femme trans
- Homme trans
- Genre queer/genre non conforme
- Autre. Veuillez specifier: _________________

3. Quel sexe vous a été attribué à la naissance ? c'est-à-dire sur votre certificat de naissance original

- Femme
- Homme

4. Quelle langue parlez-vous le plus souvent à la maison?

- Francais
- Anglais
- Autre
- Precisez: ____________

5. Veuillez indiquer à quel groupe vous vous identifiez le plus:

- Autochtones (Inuit, Métis, Indien d'Amérique du Nord)
- Arabe/Asiatique de l'est (ex: Arménien, Égyptien, Iranien, Libanais, Marocain)
- Noir (ex: Africain, Haïtien, Jamaïcain, Somalien)
- Chinois
- Philippin
- Japonais
- Coréen
- Latino-Américain
- Sud-Asiatique
- Sud-Est-Asiatique
- Blanc (Caucasien)
- Plus d’un groupe
- Autre groupe. Veuillez spécifier: ________

6. Quel est le niveau de scolarité le plus élevé que vous ayez atteint?

- École primaire
- École secondaire ou équivalent
- École technique, professionnelle ou diplôme préuniversitaire
- Université (bac)
- Diplôme professionnel
- Maîtrise
- Doctorat
- Diplôme postdoctoral
- Autre. Precisez ________________

7. Quel est votre état civil actuel?

- Marié(e) ou Relation de fait

- Célibataire
- Veuf(ve)
- Séparé(e) / Divorcé(e)

8. Dans quel pays êtes-vous né(e)?
- Canada
- Autre. Veuillez préciser

9. Pouvez-vous fournir votre meilleure estimation du revenu total de votre famille l'année dernière de toutes sources, avant impôts?
- Moins de 20 000 $
- 20 000 $ - 39 999 $
- 40 000 $ - 59 999 $
- 60 000 $ - 79 999 $
- $80,000- $99,999
- Plus que $100,000
- Je préfère ne pas répondre

10. Laquelle des catégories suivantes décrivent le mieux votre statut professionnel actuel?
- Temps plein sur le marché du travail rémunéré (30 heures ou plus par semaine)
- Temps partiel sur le marché du travail rémunérée (moins de 30 heures par semaine)
- Travailleur(e) indépendant(e)
- Sans emploi
- Invalidité ou congé de maladie
- Personne au foyer, parent à la maison
- Retraité(e) en raison de problèmes de santé
- Retraité(e) non en raison de problèmes de santé
- Autre. Veuillez préciser________

<u>Rôle et autres questions</u>

1. Parmi les choix suivants, lequel rend le mieux compte de votre relation avec la personne atteinte d'un cancer du sein ou d'un cancer gynécologique que vous aidez?
- Je suis un parent au premier degré (c.-à-d., parent, frère ou sœur, ou enfant).
- Je suis un parent au deuxième degré (c.-à-d., grands-parents, petits-enfants, tante, oncle, neveu, nièce, ou demi-frère ou demi-sœur).
- Je suis son mari ou sa femme/son conjoint ou sa conjointe.
- Je suis un ami ou une amie.
- Autre. Veuillez préciser : ________

2. Quelles catégories parmi les suivantes décrivent le mieux votre rôle actuel en tant qu'aidant naturel? (Sélectionnez toutes les catégories qui s'appliquent.)
- J'offre un soutien émotionnel (p.ex., conversation, encouragement, écoute active)
- J'offre un support pratique (p. ex., se rendre à des rendez-vous, tâches ménagères, faire des courses, aider aux soins personnels)

- Je l’aide à gérer ses soins médicaux (p. ex., prendre des rendez-vous, appeler pour un suivi, regarder les résultats des tests avec elle)
- Autre. Veuillez préciser : ________

3. Depuis combien de temps êtes-vous aidante ou aidant naturel pour cette personne (la patiente atteinte d’un cancer du sein ou d’un cancer gynécologique)? année(s), mois, jours

4. Depuis combien de temps êtes-vous aidante ou aidant naturel en général? (P. ex., prendre soin d'autres personnes ayant des problèmes de santé, élever des enfants, soigner un parent âgé)? année(s), mois, jours

5. Avez-vous eu un diagnostic de cancer dans le passé?
- Oui
- Non
- Si oui, pour quel cancer? ______
- Si oui, quand ce diagnostic de cancer a-t-il été posé? (*AAAA/MM*) _______

6. Veuillez indiquer dans quelle mesure vous êtes d’accord ou en désaccord (de 1 à 5) avec chacun des énoncés suivants.

Pas du tout d’accord	En désaccord	Neutre	D’accord	Tout à fait d’accord
1	2	3	4	5

   a. L’équipe de soins en oncologie me considère comme membre ou partenaire de leur équipe.
   b. Les connaissances que j’ai acquises en étant aidant(e) naturel(le) sont considérées importantes par l’équipe de soins en oncologie.

Remarque : Si vous vous sentez en détresse à la suite de ces questionnaires, veuillez contacter notre équipe de recherche pour vous diriger vers les ressources appropriées.
Courriel : Loiselle.Lab.ccomtl@ssss.gouv.qc.ca
Téléphone : 514-398-8977
Vous pouvez aussi contacter les services ci-dessous

RESSOURCES PROFESSIONNELLES DISPONIBLES POUR LES AIDANTS NATURELS
Hôpital général juif *Département d’Oncologie Psychosocial (HGJ) : (514) 340-8222 ext. 3223* *Évaluation psychologique et traitement fournis par des psychologues et travailleurs sociaux*
Hôpital général juif L’espoir c’est la vie 514-340-8255 *Groupes de support et autres programmes par exemple Reiki, formation pour l’adaptation, art, chorale…*

Ligne d'appel 24-heures pour assistance immédiate
Suicide Action Montréal : (514) 723-4000
Centre de Crise de l'Ouest de l'île : (514) 684-6160

Volunteers' questionnaires

Perceptions of Team Effectiveness: (Kilpatrick et al, 2019) (At T1 and T2)

The scale was adapted for use with minimal changes to reflect volunteers' perceptions.

Please indicate the team you are volunteering with:

- Breast Cancer team
- Gynecologic Cancer team

-

-

The following statements are about how cancer care teams work together. Please indicate the extent to which you disagree (1) or agree (6) with each statement below about the cancer team effectiveness during COVID-19.

Strongly disagree	Disagree	Disagree somewhat	Agree somewhat	Agree	Strongly agree
1	2	3	4	5	6

1. The roles of members of the cancer care team are well-defined
2. I am happy with the way work is divided among members of the cancer care team
3. I have a role to play in the cancer care team
4. My contribution is valued by members of the cancer care team
5. I trust all the members of the cancer care team
6. The cancer care team is effective in providing cancer care
7. Team members share relevant information to help patients make decisions about healthcare
8. Cancer care team members know the goals of patients' plan of care
9. The test results and consultations are updated in patients' chart
10. The flow of information among team members, patients, friends, and families is constrained (limited)
11. Team members work together to solve patients' healthcare issues
12. Patients are aware of next steps in their plan of care
13. The healthcare team adjusts treatments according to changes in patients' condition
14. My ideas, information or observations are valued by members of the healthcare team
15. Differences of opinions among team members are respected
16. Working with friends or families to solve patient care issues is not part of the team's mandate
17. Patients' cancer care is well-organized

18. Patient care is delivered in a timely manner
19. Patients can easily access cancer care professionals who can order tests and/or medication
20. Potential or actual complications are dealt with quickly by the team
21. Patients return home with unanswered questions about their medication
22. All relevant information is available to the cancer care team if patients need to consult another healthcare provider or if they are hospitalized on another unit
23. Patients return home with all their questions answered about their care
24. Members of the cancer care team possess in-depth knowledge and the skills required to provide care

Relational Coordination (Gittell et al., 2000) (At T1 and T2 of study)

The scale was adapted for use with minimal changes to reflect volunteers' perceptions of cancer team communication and relationships.

The following asks about communication and relationships among cancer team members

- Cancer specialists include medical, surgical and radiation oncologists
- Nurses include head nurses, nurse navigators (nurse pivot), nurse practitioners and oncology nurses
- Allied healthcare professionals include geneticists, nutritionists, physiotherapists, occupational therapists, psychiatrists, psychologists and social workers and other disciplines.

Please respond to the following questions about cancer care team communication and relationships during COVID-19.

1. In your opinion, how *frequently* do members in these groups communicate with each other about patients?

Cancer specialists	Never	Rarely	Occasionally	Often	Constantly
Nurses	Never	Rarely	Occasionally	Often	Constantly
Allied healthcare professionals	Never	Rarely	Occasionally	Often	Constantly

2. In your opinion, do they communicate with each other in a *timely* way about patients?

Cancer specialists	Never	Rarely	Occasionally	Often	Always
Nurses	Never	Rarely	Occasionally	Often	Always
Allied healthcare professionals	Never	Rarely	Occasionally	Often	Always

3. In your opinion, do they communicate with each other *accurately* about patients?

Cancer specialists	Never	Rarely	Occasionally	Often	Always
Nurses	Never	Rarely	Occasionally	Often	Always
Allied healthcare professionals	Never	Rarely	Occasionally	Often	Always

4. In your opinion, when problems arise regarding the care of patients, do they *work with each other* to solve the problem?

Cancer specialists	Never	Rarely	Occasionally	Often	Always
Nurses	Never	Rarely	Occasionally	Often	Always
Allied healthcare professionals	Never	Rarely	Occasionally	Often	Always

5. In your opinion, how much do they *know about the work each one does* in caring for patients?

Cancer specialists	Nothing	Little	Some	A lot	Everything
Nurses	Nothing	Little	Some	A lot	Everything
Allied healthcare professionals	Nothing	Little	Some	A lot	Everything

6. How much do they *respect the work that other team members do* in caring for patients?

Cancer specialists	Not at all	A little	Somewhat	A lot	Completely
Nurses	Not at all	A little	Somewhat	A lot	Completely
Allied healthcare professionals	Not at all	A little	Somewhat	A lot	Completely

7. How much do they *share goals for the care* of patients?

Cancer specialists	Not at all	A little	Somewhat	A lot	Completely
Nurses	Not at all	A little	Somewhat	A lot	Completely
Allied healthcare professionals	Not at all	A little	Somewhat	A lot	Completely

Socio-demographic questionnaire (At T1 of study)

1. What is your age? ________
2. To which gender do you most identify?

- Male
- Female
- Transgender male
- Transgender female
- Non-binary
- Gender queer
- Prefer not to answer
- Other identity. Please specify: _________________

3. What sex were you assigned at birth, meaning on your original birth certificate?

- Male
- Female

4. What language do you speak most often?

- French
- English
- Other
- Please specify: ____________

5. Please choose the group with which you most identify:

- Aboriginal (Inuit, Métis, North American Indian)
- Arab/West Asian (e.g., Armenian, Egyptian, Iranian, Lebanese, Moroccan)
- Black (e.g., African, Haitian, Jamaican, Somali)
- Chinese
- Filipino
- Japanese
- Korean
- Latin American
- South Asian
- Southeast Asian
- White (Caucasian)
- More than one group
- Another group
- Please specify: _______________
- Prefer to not answer

6. Highest level of education completed

- Elementary school
- High school diploma or equivalent
- Technical, vocational school, or pre-university degree
- University (undergraduate: bachelor)

- Professional degree (medical degree, law school, etc.)
- Master’s degree
- Doctoral degree
- Post Doctorate
- Other
- Please specify: ________________

7. What is your current status?
- Married/common law (two people living together but not married to each other)
- Single (never legally married)
- Widowed
- Separated/divorced

8. In which country were you born?
- Canada
- Other. Please specify: _____________

9. What is your total family income from all sources before taxes last year?
- Less than $20,000
- $20,000 - $39,999
- $40,000-$59,999
- $60,000-$79,999
- $80,000- $99,999
- More than $100,000
- Prefer to not answer

10. Which of the following categories best describes your current work status?
- Full time in the paid work force (30 hours or more per week)
- Part time in the paid work force (less than 30 hours per week)
- Self employed
- Unemployed
- Disability/sick leave
- Homemaker/stay at home parent
- Retired – due to health issues
- Retired – not due to health issues
- Other.
- Please specify: ________

<u>Role and other questions</u>

1. How long have you been a volunteer at this clinic? Year(s), Month(s)
2. How long have you been a volunteer in general? Year(s), Month(s)
3. A volunteer’s role often involves offering practical and emotional support to patients and/or family members. Varied duties include greeting and guiding patients, bringing

them into exam rooms, and providing supportive services as requested by healthcare providers. Please describe your current role/tasks as a volunteer. ________

4. Have you been diagnosed with cancer before?

- Yes
- No
- If Yes, what type of cancer did you have? ______
- If Yes, when were you diagnosed with this cancer? (YYYY/MM) _____

5. Please rate the extent to which you disagree or agree (from 1 to 5) with each of the following statements.

Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	2	3	4	5

a. The cancer care team considers me an inherent member of their team
b. The knowledge I am gaining by being a volunteer is considered important to the cancer team

Questionnaires des bénévoles

Perceptions de l'efficacité de l'équipe de soins (Kilpatrick et al., 2019) (à T1 et T2)

L'échelle a été adaptée avec des changements minimes pour refléter l'équipe de soins en oncologie plutôt qu'une équipe de soins de santé générale

Veuillez sélectionner l'équipe sur laquelle portent vos commentaires (comme bénévole)

- Équipe de soins en cancer du sein
- Équipe de soins en cancer gynécologique

Les questions suivantes portent sur la façon dont les prestataires de soins de santé qui participent à la prestation des soins en oncologie travaillent en équipe. Veuillez évaluer dans quelle mesure vous êtes en désaccord ou en accord (de 1 à 6) avec chacun des énoncés ci-dessous portant sur l'efficacité de l'équipe durant la COVID-19.

Fortement en désaccord	En Désaccord	Un peu en désaccord	Un peu en accord	En accord	Fortement en accord
1	2	3	4	5	6

1. Les rôles des membres de l'équipe de soins en oncologie sont bien définis
2. Je suis content(e) de la manière dont le travail est divisé entre les membres de l'équipe de soins en oncologie
3. J'ai un rôle à jouer dans l'équipe de soins en oncologie
4. Ma contribution est valorisée par l'équipe de soins en oncologie
5. J'ai confiance à tous les membres de l'équipe de soins en oncologie

6. L’équipe de soins est efficace à fournir des soins en oncologie
7. Les membres de l’équipe de soins en oncologie partagent les informations nécessaires pour aider les patientes à prendre des décisions sur les soins de santé
8. Les membres de l’équipe de soins en oncologie connaissent les objectifs de soins
9. Les résultats d’examen et les consultations sont à jour dans le dossier de la patiente
10. L’échange d’information entre les membres de l’équipe, les patients, la famille et les proches est restreint (limité)
11. Les membres de l’équipe travaillent ensemble pour régler des questions portant sur les soins en oncologie
12. Les patientes connaissent les prochaines étapes des soins de santé
13. L’équipe de soins en oncologie ajuste les traitements face aux changements dans la condition de santé des patientes
14. Mes idées, informations ou observations sont prises en compte par les membres de l’équipe de soins en oncologie
15. Les différences d’opinion parmi les membres de l’équipe sont respectées
16. Les membres de l’équipe de soins ne travaillent pas avec les familles ou les proches pour régler des questions portant sur les soins
17. Les soins contre le cancer sont bien organisés
18. Les soins de santé sont offerts dans un délai convenable
19. Les patientes ont accès facilement aux professionnels de soins en oncologie qui peuvent prescrire des examens et/ou des médicaments
20. Les complications potentielles ou réelles sont gérées rapidement par l’équipe
21. Les patientes retournent à la maison avec des questionnements sur la médication
22. Toutes les informations pertinentes sont disponibles à l’équipe de soins si la patiente doit consulter un autre intervenant ou changer de service
23. Les patientes retournent à la maison avec toutes les questions sur leurs soins de santé répondues
24. Les membres de l’équipe possèdent les connaissances approfondies et l’expertise nécessaires pour prodiguer les soins de santé

Coordination Relationnelle (Gittell et al., 2000) (à T1 et T2)

L’échelle a été adaptée pour être utilisée avec des changements minimes afin de refléter les perceptions des bénévoles à l’égard de la communication et les relations entre les membres de l’équipe

Les questions suivantes portent sur la communication et les relations entre les membres de l’équipe de soins

- *Les spécialistes du cancer comprennent les oncologues médicaux, les chirurgiens et chirurgiennes oncologues et les radio-oncologues)*
- *Le personnel infirmier comprend les infirmiers et infirmières en chef, les infirmiers et infirmières-pivots, les infirmières et infirmiers praticiens spécialisés, et les infirmiers et infirmières en oncologie.*

- *Les prestataires de soins paramédicaux comprennent les généticiens, nutritionnistes, les physiothérapeutes, les ergothérapeutes, les psychologues et les travailleuses et travailleurs sociaux.*

Veuillez répondre aux questions suivantes sur la communication et les relations entre les membres de l'équipe durant la COVID-19.

1. À votre avis, à quelle *fréquence* les membres de ces groupes communiquent-ils entre eux concernant la situation des patientes?

Spécialistes du cancer	Jamais	Rarement	Occasionnellement	Souvent	Constamment
Personnel infirmier	Jamais	Rarement	Occasionnellement	Souvent	Constamment
Prestataires de soins paramédicaux	Jamais	Rarement	Occasionnellement	Souvent	Constamment

2. À votre avis, est-ce qu'ils communiquent entre eux *en temps opportun* concernant la situation des patientes?

Spécialistes du cancer	Jamais	Rarement	Occasionnellement	Souvent	Toujours
Personnel infirmier	Jamais	Rarement	Occasionnellement	Souvent	Toujours
Prestataires de soins paramédicaux	Jamais	Rarement	Occasionnellement	Souvent	Toujours

3. À votre avis, est-ce qu'ils communiquent entre eux *adéquatement* concernant la situation des patientes?

Spécialistes du cancer	Jamais	Rarement	Occasionnellement	Souvent	Toujours
Personnel infirmier	Jamais	Rarement	Occasionnellement	Souvent	Toujours
Prestataires de soins paramédicaux	Jamais	Rarement	Occasionnellement	Souvent	Toujours

4. À votre avis, lorsque des problèmes surviennent dans les soins prodigués aux patientes, est-ce que les membres de ces groupes *travaillent les uns avec les autres* pour régler le problème?

Spécialistes du cancer	Jamais	Rarement	Occasionnellement	Souvent	Toujours

Personnel infirmier	Jamais	Rarement	Occasionnellement	Souvent	Toujours
Prestataires de soins paramédicaux	Jamais	Rarement	Occasionnellement	Souvent	Toujours

5. À votre avis, qu'est-ce que les membres de ces groupes *connaissent du travail que chacun contribue* aux soins des patientes?

Spécialistes du cancer	Rien	Peu	Un peu	Beaucoup	Tout
Personnel infirmier	Rien	Peu	Un peu	Beaucoup	Tout
Prestataires de soins paramédicaux	Rien	Peu	Un peu	Beaucoup	Tout

6. Dans quelle mesure *respectent-ils le travail* consacré au soin des patientes *par les autres membres de l'équipe*?

Spécialistes du cancer	Pas du tout	Un peu	Moyennement	Beaucoup	Complètement
Personnel infirmier	Pas du tout	Un peu	Moyennement	Beaucoup	Complètement
Prestataires de soins paramédicaux	Pas du tout	Un peu	Moyennement	Beaucoup	Complètement

7. Dans quelle mesure *partagent-ils les objectifs de soins* des patientes?

Spécialistes du cancer	Pas du tout	Un peu	Moyennement	Beaucoup	Complètement
Personnel infirmier	Pas du tout	Un peu	Moyennement	Beaucoup	Complètement
Prestataires de soins paramédicaux	Pas du tout	Un peu	Moyennement	Beaucoup	Complètement

Données Sociodémographiques (à T1)

1. Quel âge avez-vous? (en année)
2. Je m'identifie comme

- Femme

- Homme
- Femme trans
- Homme trans
- Genre queer/genre non conforme
- Autre. Veuillez specifier: _________________

3. Quel sexe vous a été attribué à la naissance ? c'est-à-dire sur votre certificat de naissance original

- Femme
- Homme

4. Quelle langue parlez-vous le plus souvent à la maison?

- Francais
- Anglais
- Autre. Precisez: ____________

5. Veuillez indiquer à quel groupe vous vous identifiez le plus:

- Autochtones (Inuit, Métis, Indien d'Amérique du Nord)
- Arabe/Asiatique de l'est (ex: Arménien, Égyptien, Iranien, Libanais, Marocain)
- Noir (ex: Africain, Haïtien, Jamaïcain, Somalien)
- Chinois
- Philippin
- Japonais
- Coréen
- Latino-Américain
- Sud-Asiatique
- Sud-Est-Asiatique
- Blanc (Caucasien)
- Plus d’un groupe
- Autre groupe. Veuillez spécifier: ________

6. Quel est le niveau de scolarité le plus élevé que vous ayez atteint?

- École primaire
- École secondaire ou équivalent
- École technique, professionnelle ou diplôme préuniversitaire
- Université (bac)
- Diplôme professionnel
- Maîtrise
- Doctorat
- Diplôme postdoctoral
- Autre. Precisez ________________

7. Quel est votre état civil actuel?
- Marié(e) ou Relation de fait
- Célibataire
- Veuf(ve)
- Séparé(e) / Divorcé(e)

8. Dans quel pays êtes-vous né(e)?
- Canada
- Autre. Veuillez préciser

9. Pouvez-vous fournir votre meilleure estimation du revenu total de votre famille l'année dernière de toutes sources, avant impôts?
- Moins de 20 000 $
- 20 000 $ - 39 999 $
- 40 000 $ - 59 999 $
- 60 000 $ - 79 999 $
- $80,000- $99,999
- Plus que $100,000
- Je préfère ne pas répondre

10. Laquelle des catégories suivantes décrivent le mieux votre statut professionnel actuel?
- Temps plein sur le marché du travail rémunéré (30 heures ou plus par semaine)
- Temps partiel sur le marché du travail rémunérée (moins de 30 heures par semaine)
- Travailleur(e) indépendant(e)
- Sans emploi
- Invalidité ou congé de maladie
- Personne au foyer, parent à la maison
- Retraité(e) en raison de problèmes de santé
- Retraité(e) non en raison de problèmes de santé
- Autre. Veuillez préciser________

Rôle et autres questions

1. Depuis combien de temps êtes-vous bénévole à cette clinique? année(s), mois

2. Depuis combien de temps êtes-vous bénévole en général? année(s), mois

3. Le rôle de bénévole consiste souvent à offrir un soutien pratique et émotif aux patients ou à leur famille, ou aux deux. Les diverses tâches comprennent l'accueil et l'orientation des patients, les amener dans les salles d'examen, et leur offrir des services de soutien à la demande des prestataires de soins de santé. Veuillez décrire votre rôle ou vos tâches actuels comme bénévole. ________

4. Avez-vous eu un diagnostic de cancer dans le passé?

- Oui
- Non
- Si oui, pour quel cancer? ______
- Si oui, quand ce diagnostic de cancer a-t-il été posé? (*AAAA/MM*) _____

5. Veuillez indiquer dans quelle mesure vous êtes d'accord ou en désaccord (de 1 à 5) avec chacun des énoncés suivants.

Pas du tout d'accord	En désaccord	Neutre	D'accord	Tout à fait d'accord
1	2	3	4	5

a. L'équipe de soins en oncologie me considère comme membre ou partenaire de leur équipe.
b. Les connaissances que j'ai acquises en étant bénévole sont considérées importantes par l'équipe de soins en oncologie.

Appendix J: FCM analysis data (supplement)

Adjacency matrices and edge lists of the category maps by stakeholder group

Note: The tabulations show category-level relationships for the maps overall and from each stakeholder group. Each map is represented in two different formats. First, an adjacency matrix, in which relationships go from the nodes in the rows to the nodes in the columns, and the value of each cell is the weight of the relationship. Second, an edge list with the same information in the form of a table with three columns. The first column indicates the origin category node, the second column indicates the landing category node, and the third column indicates the weight of the relationship.

a) Adjacency matrix: Summary of all maps

		C01	C02	C03	C04	C05	C06	C07	C08	C09	C10	C11	C12	C13	C14	C15
Optimal Cancer Care Team Functioning	C01	0.27	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	-0.1
Effective communication	C02	0.82	0.3	0.0	0.1	0.1	0.1	0.3	0.2	0.2	0.4	0.0	0.0	0.0	0.0	-0.1
Optimize volunteers' role and experience	C03	0.45	0.0	0.3	0.3	0.3	0.6	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Caregivers' active involvement and support	C04	0.43	0.0	0.0	0.6	0.3	0.2	0.0	0.1	0.0	1.0	0.0	0.0	0.0	0.0	0.0

Support for psychosocial needs	C05	0.75	0.4	0.0	0.1	0.3	0.2	0.2	0.3	0.1	0.9	0.1	0.0	-0.2	0.0	0.0
Patient engagement	C06	0.18	0.1	0.0	0.0	0.1	0.1	0.0	0.1	0.0	0.2	0.0	0.0	0.0	0.0	0.0
The philosophy of care (care ethos)	C07	0.81	0.2	0.0	0.1	0.4	0.1	0.4	0.1	0.0	0.8	0.0	0.0	0.0	0.0	-0.1
Clarity of team members' roles	C08	0.71	0.2	0.1	0.1	0.2	0.4	0.0	0.2	0.1	0.6	0.0	0.0	0.0	0.0	0.0
Active involvement of allied stakeholders	C09	0.10	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.2	0.0	0.0	0.0	-0.1	0.0
Improved care experience	C10	0.81	0.2	0.0	0.1	0.3	0.2	0.1	0.2	0.0	0.8	0.0	0.0	-0.1	0.0	0.0
Follow standardized protocols	C11	0.14	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0
Improved access to health records and timely charting	C12	0.12	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Remote work and virtual care	C13	0.15	0.2	0.0	0.0	-0.1	0.0	-0.1	0.0	0.1	-0.1	0.0	0.0	0.0	0.0	0.0
Lack of resources and limited budget	C14	0.11	0.0	0.0	0.0	-0.2	0.0	0.0	-0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
High admin and government policies	C15	0.01	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Edge list: Summary of all maps

From-To	Weight
C01-C01	0.43
C02-C01	1.29
C03-C01	0.70
C04-C01	0.67
C05-C01	1.17
C06-C01	0.29
C07-C01	1.27
C08-C01	1.11
C09-C01	0.16
C10-C01	1.27
C11-C01	0.21
C12-C01	0.19
C13-C01	0.23
C14-C01	0.17
C15-C01	0.01
C01-C02	0.13
C02-C02	0.51
C05-C02	0.59
C06-C02	0.14

C07-C02	0.26
C08-C02	0.31
C09-C02	0.09
C10-C02	0.24
C11-C02	0.13
C12-C02	0.11
C13-C02	0.33
C14-C02	0.03
C03-C03	0.53
C08-C03	0.14
C02-C04	0.14
C03-C04	0.40
C04-C04	0.93
C05-C04	0.16
C07-C04	0.14
C08-C04	0.14
C10-C04	0.14
C11-C04	0.13
C01-C05	0.01
C02-C05	0.17
C03-C05	0.51

C04-C05	0.43
C05-C05	0.40
C06-C05	0.11
C07-C05	0.69
C08-C05	0.36
C09-C05	0.11
C10-C05	0.51
C13-C05	- 0.20
C14-C05	- 0.39
C02-C06	0.14
C03-C06	1.00
C04-C06	0.29
C05-C06	0.36
C06-C06	0.14
C07-C06	0.11
C08-C06	0.56
C10-C06	0.24
C01-C07	- 0.03
C02-C07	0.46
C05-C07	0.33
C07-C07	0.66

C08-C07	0.06
C10-C07	0.11
C13-C07	- 0.11
C15-C07	0.53
C01-C08	0.14
C02-C08	0.29
C03-C08	0.60
C04-C08	0.14
C05-C08	0.50
C06-C08	0.14
C07-C08	0.11
C08-C08	0.26
C09-C08	0.11
C10-C08	0.24
C13-C08	0.07
C14-C08	- 0.13
C01-C09	0.13
C02-C09	0.26
C05-C09	0.13
C08-C09	0.11
C09-C09	- 0.01

C12-C09	0.11
C13-C09	0.13
C14-C09	0.13
C02-C10	0.60
C04-C10	1.57
C05-C10	1.40
C06-C10	0.29
C07-C10	1.27
C08-C10	0.94
C09-C10	0.26
C10-C10	1.24
C11-C10	0.29
C13-C10	- 0.11
C05-C11	0.10
C05-C12	- 0.03
C12-C12	0.07
C13-C12	0.06
C02-C13	- 0.07
C05-C13	- 0.30
C06-C13	- 0.07
C07-C13	- 0.07

C08-C13	-	0.07
C10-C13	-	0.14
C13-C13	-	0.07
C09-C14	-	0.14
C01-C15	-	0.10
C02-C15	-	0.10
C07-C15	-	0.19

b) Adjacency matrix: Map of HCPs

		C01	C02	C03	C04	C05	C06	C07	C08	C09	C10	C11	C12	C13	C14	C15
Optimal Cancer Care Team Functioning	C01	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	-0.1
Effective communication	C02	1.0	0.4	0.0	0.0	-0.1	0.0	0.5	0.1	0.3	0.0	0.0	0.0	0.0	0.0	-0.1
Optimize volunteers' role and experience	C03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Caregivers' active involvement and support	C04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Support for psychosocial needs	C05	0.6	0.3	0.0	0.0	0.3	0.0	0.2	0.2	0.1	0.0	0.1	0.0	-0.2	0.0	0.0

Patient engagement	C06	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
The philosophy of care (care ethos)	C07	1.0	0.0	0.0	0.0	0.4	0.0	0.7	0.0	0.0	0.7	0.0	0.0	0.0	0.0	-0.2
Clarity of team members' roles	C08	0.4	0.2	0.0	0.0	0.1	0.0	0.1	0.0	0.1	0.2	0.0	0.0	0.0	0.0	0.0
Active involvement of allied stakeholders	C09	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	-0.1	0.0
Improved care experience	C10	0.2	0.0	0.0	0.0	0.2	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Follow standardized protocols	C11	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Improved access to health records and timely charting	C12	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0
Remote work and virtual care	C13	0.4	0.3	0.0	0.0	-0.2	0.0	-0.1	0.1	0.1	-0.1	0.0	0.1	-0.1	0.0	0.0
Lack of resources and limited budget	C14	0.2	0.0	0.0	0.0	-0.4	0.0	0.0	-0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
High admin and government policies	C15	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Edge list: Map of HCP

From-To	Weight
C01-C01	0.29
C02-C01	1.00
C05-C01	0.63
C07-C01	1.00
C08-C01	0.41
C09-C01	0.03
C10-C01	0.23
C11-C01	0.07
C12-C01	0.19
C13-C01	0.36
C14-C01	0.17
C15-C01	0.01
C01-C02	0.13
C02-C02	0.37
C05-C02	0.33
C08-C02	0.17
C09-C02	0.09
C12-C02	0.11

C13-C02	0.33
C14-C02	0.03
C01-C05	0.01
C02-C05	- 0.09
C05-C05	0.27
C07-C05	0.43
C08-C05	0.11
C09-C05	0.11
C10-C05	0.23
C13-C05	- 0.20
C14-C05	- 0.39
C01-C07	- 0.03
C02-C07	0.46
C05-C07	0.19
C07-C07	0.66
C08-C07	0.06
C10-C07	0.11
C13-C07	- 0.11
C15-C07	0.53
C01-C08	0.14
C02-C08	0.14

C05-C08	0.24
C09-C08	0.11
C13-C08	0.07
C14-C08	- 0.13
C01-C09	0.13
C02-C09	0.26
C05-C09	0.13
C08-C09	0.11
C09-C09	- 0.01
C12-C09	0.11
C13-C09	0.13
C14-C09	0.13
C02-C10	0.03
C07-C10	0.74
C08-C10	0.23
C10-C10	0.13
C13-C10	- 0.11
C05-C11	0.10
C05-C12	- 0.03
C12-C12	0.07
C13-C12	0.06

C05-C13	-	0.16
C13-C13	-	0.07
C09-C14	-	0.14
C01-C15	-	0.10
C02-C15	-	0.10
C07-C15	-	0.19

c) Adjacency matrix: Map of patients

		C01	C02	C03	C04	C05	C06	C07	C08	C09	C10	C11	C12	C13	C14	C15
Optimal Cancer Care Team Functioning	C01	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Effective communication	C02	0.3	0.3	0.0	0.0	0.2	0.3	0.0	0.3	0.0	0.5	0.0	0.0	-0.1	0.0	0.0
Optimize volunteers’ role and experience	C03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Caregivers’ active involvement and support	C04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Support for psychosocial needs	C05	0.5	0.5	0.0	0.0	0.5	0.5	0.3	0.5	0.0	1.0	0.0	0.0	-0.3	0.0	0.0

Patient engagement	C06	0.3	0.3	0.0	0.0	0.2	0.3	0.0	0.3	0.0	0.5	0.0	0.0	-0.1	0.0	0.0
The philosophy of care (care ethos)	C07	0.2	0.2	0.0	0.0	0.2	0.2	0.0	0.2	0.0	0.4	0.0	0.0	-0.1	0.0	0.0
Clarity of team members' roles	C08	0.3	0.3	0.0	0.0	0.2	0.3	0.0	0.3	0.0	0.5	0.0	0.0	-0.1	0.0	0.0
Active involvement of allied stakeholders	C09	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Improved care experience	C10	0.9	0.4	0.0	0.0	0.4	0.4	0.0	0.4	0.0	0.9	0.0	0.0	-0.3	0.0	0.0
Follow standardized protocols	C11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Improved access to health records and timely charting	C12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Remote work and virtual care	C13	-0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lack of resources and limited budget	C14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
High admin and government policies	C15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Edge list: Map of patients

From-To	Weight
C01-C01	0.14
C02-C01	0.14
C05-C01	0.26
C06-C01	0.14
C07-C01	0.13
C08-C01	0.14
C10-C01	0.47
C13-C01	- 0.13
C02-C02	0.14
C05-C02	0.26
C06-C02	0.14
C07-C02	0.11
C08-C02	0.14
C10-C02	0.24
C02-C05	0.11
C05-C05	0.26
C06-C05	0.11
C07-C05	0.11
C08-C05	0.11

C10-C05	0.23
C02-C06	0.14
C05-C06	0.26
C06-C06	0.14
C07-C06	0.11
C08-C06	0.14
C10-C06	0.24
C05-C07	0.14
C02-C08	0.14
C05-C08	0.26
C06-C08	0.14
C07-C08	0.11
C08-C08	0.14
C10-C08	0.24
C02-C10	0.29
C05-C10	0.54
C06-C10	0.29
C07-C10	0.24
C08-C10	0.29
C10-C10	0.49
C02-C13	- 0.07

C05-C13	-	0.14
C06-C13	-	0.07
C07-C13	-	0.07
C08-C13	-	0.07
C10-C13	-	0.14

d) Adjacency matrix: Maps of informal caregivers

		C01	C02	C03	C04	C05	C06	C07	C08	C09	C10	C11	C12	C13	C14	C15
Optimal Cancer Care Team Functioning	C01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Effective communication	C02	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0
Optimize volunteers' role and experience	C03	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Caregivers' active involvement and support	C04	0.4	0.0	0.0	0.6	0.3	0.2	0.0	0.1	0.0	1.0	0.0	0.0	0.0	0.0	0.0
Support for psychosocial needs	C05	0.2	0.0	0.0	0.1	-0.1	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0
Patient engagement	C06	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

The philosophy of care (care ethos)	C07	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0
Clarity of team members' roles	C08	0.2	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
Active involvement of allied stakeholders	C09	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0
Improved care experience	C10	0.4	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0
Follow standardized protocols	C11	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0
Improved access to health records and timely charting	C12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Remote work and virtual care	C13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lack of resources and limited budget	C14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
High admin and government policies	C15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Edge list: Map informal caregivers

From-To	Weight
C02-C01	0.14
C03-C01	0.14
C04-C01	0.57
C05-C01	0.29
C06-C01	0.14
C07-C01	0.14
C08-C01	0.27
C09-C01	0.13
C10-C01	0.57
C11-C01	0.14
C07-C02	0.14
C11-C02	0.13
C02-C04	0.14
C04-C04	0.93
C05-C04	0.16
C07-C04	0.14
C08-C04	0.14
C10-C04	0.14
C11-C04	0.13

C02-C05	0.14
C04-C05	0.43
C05-C05	- 0.13
C07-C05	0.14
C08-C05	0.13
C10-C05	0.06
C03-C06	0.14
C04-C06	0.29
C08-C06	0.13
C04-C08	0.14
C02-C10	0.29
C04-C10	1.57
C05-C10	0.86
C07-C10	0.29
C08-C10	0.43
C09-C10	0.26
C10-C10	0.63
C11-C10	0.29

e) Adjacency matrix: Map of volunteers

		C01	C02	C03	C04	C05	C06	C07	C08	C09	C10	C11	C12	C13	C14	C15
Optimal Cancer Care Team Functioning	C01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Effective communication	C02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Optimize volunteers’ role and experience	C03	0.7	0.0	0.6	0.5	0.6	1.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Caregivers’ active involvement and support	C04	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Support for psychosocial needs	C05	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Patient engagement	C06	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
The philosophy of care (care ethos)	C07	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Clarity of team members' roles	C08	0.3	0.0	0.2	0.0	0.0	0.3	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Active involvement of allied stakeholders	C09	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Improved care experience	C10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Follow standardized protocols	C11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Improved access to health records and timely charting	C12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Remote work and virtual care	C13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lack of resources and limited budget	C14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
High admin and government policies	C15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Edge list: Maps of volunteers

From-To	Weight
C03-C01	0.56
C04-C01	0.10
C08-C01	0.29
C03-C03	0.53

C08-C03	0.14
C03-C04	0.40
C03-C05	0.51
C03-C06	0.86
C05-C06	0.10
C08-C06	0.29
C03-C08	0.60
C08-C08	0.11

List of unique factors across the maps and their corresponding categories.

Note: The table presents the standard name of each factor and the category to which it belongs. Factors and categories have unique associated codes (F1 to F79 for factors and C01 to C15 for categories) to facilitate notation on tabular formats of the maps. Factors are classified into positive (P) and negative (N) factors influencing optimal cancer care team functioning.

	#		Standard name of the factor	Category	Code
F	1		Optimal/best cancer care team functioning	Optimal team functioning	C01
F	2	P	Strengthened team member relationships and team dynamics		
F	3	P	Work organization and efficiency		
F	4	P	Teamwork		
F	5	P	Collaboration, coordination, and timely communication between HCPs		
F	6	P	Open, ongoing, and timely team communication	Effective communication	C02
F	7	P	Regular and good team communication of cancer team and other departments		

F 8	N	Reliance on personal devices for communication between team members and patients during the pandemic		
F 9	N	Lack of regular check-ins across multidisciplinary team members during the pandemic		
F 10	N	Lack of opportunities to discuss patient case management as a team during the pandemic		
F 11	P	Effective communication between team members and with patients		
F 12	P	Clear channels of communication between team members (acknowledging receipt of information and replying)		
F 13	P	Profile matching between patients and volunteers	Optimize volunteers’ role and experience	C03
F 14	P	Regular meetings between volunteers to share information and effective support strategies		
F 15	P	Standardized reporting by volunteers		
F 16	P	Additional training and informational sessions for volunteers		
F 17	P	Inclusivity of volunteers as members of the team		
F 18	P	Volunteers with previous cancer experience		
F 19	P	Caregivers being mentored by volunteers	Caregivers’ active involvement and support	C04
F 20	N	Caregivers feeling undervalued by the cancer care team		
F 21	N	Caregivers feeling unheard by the cancer care team		
F 22	P	Patients and caregivers feeling included in decision making by the cancer care team		
F 23	P	Additional training and informational sessions for caregivers		
F 24	P	Actions to support for caregivers and strengthen their role		
F 25	P	Referrals to allied HCPs and external support resources	Support for psychosocial needs	C05
F 26	P	Support system for patients		
F 27	P	Presence of a liaison/patient advocate		
F 28	P	New roles/resources created during pandemic		
F 29	N	Physical and mental isolation (of patients and team members) during the pandemic		
F 30	N	Lack of downtime and self-care for HCPs		

F 31	N	Reduction of in-person support for caregivers during the pandemic		
F 32	P	Additional oncology pivot nurses		
F 33	N	Need for psychosocial support for patients		
F 34	N	Lack of time for HCPs emotional support		
F 35	N	Burden of patient care leading to HCPs low morale		
F 36	N	Burnout of HCPs		
F 37	N	Low accessibility to affiliated HCPs or a support team		
F 38	P	Patient engagement with the support from volunteers	Patient engagement	C06
F 39	P	Patient engagement and more supportive resources		
F 40	P	Compassion and empathy	The philosophy of care (care ethos)	C07
F 41	P	Patient focused care		
F 42	P	Common philosophy of caring		
F 43	P	Mutual respect and equality (towards patients and with colleagues)		
F 44	P	Respect for patient's autonomy		
F 45	P	Reinforcement of care ethos within the team		
F 46	N	Healthcare environment inconducive to caring ethos		
F 47	N	Doctors' ethos/approaches compromised and challenged		
F 48	N	Decrease in patient care quality		
F 49	P	Defining and clarifying team members' roles	Clarity of team members’ roles	C08
F 50	P	Clarifying the role and expectations of volunteers to HCPs and setting expectations/boundaries		
F 51	N	Power shift towards nurses and admin staff but responsibility remains mainly on doctors		
F 52	P	Better understanding of the expectations of volunteers		
F 53	P	Involvement of family doctors	Active involvement of allied stakeholders	C09
F 54	P	Consistent involvement of allied HCPs in patient care		
F 55	N	Limited implication of community-based partners during the pandemic		
F 56	P	Improved experience in the testing phase (e.g., blood test, x-rays)	Improved care experience	C10

F 57	P	Specific parking zones for patients and caregivers		
F 58	N	Limited time of HCPs for follow-ups with patients and caregivers		
F 59	N	Patients' lack of trust in the healthcare system		
F 60	P	Trust and good relationships between patient and the team		
F 61	N	Lack of alignment between patients and HCPs on priorities and needs		
F 62	N	Loss of trust and respect towards oncologists		
F 63	P	Following standardized guidelines during the pandemic	Follow standardized protocols	C11
F 64	N	Lack of access to updated COVID-19 protocols		
F 65	P	Access to health records	Improved access to health records and timely charting	C12
F 66	P	Improvement in timely charting		
F 67	N	Lack of synchronization between charting platforms		
F 68	P	Usage of virtual desktop during the pandemic	Remote work and virtual care	C13
F 69	N	Inability to do physical exams during the pandemic		
F 70	P	Pivoting towards technology during the pandemic		
F 71	P	Virtual consultations		
F 72	N	Lack of virtual communication modalities for team meetings		
F 73	P	Usage of virtual modalities for communication		
F 74	N	Reduced in-person meetings with patients and between team members during the pandemic		
F 75	N	Difficulty when HCPs' specialties cannot be practised virtually		
F 76	N	Lack of resources and limited budget	Lack of resources and limited budget	C14
F 77	N	Staff shortages, especially allied HCPs		
F 78	N	Additional tasks assigned to HCPs during the pandemic		
F 79	N	High admin and government policies	High admin and government policies	C15