cases of malnutrition and improve overall patient care while preventing falls and related complications.

Figure 1. Description of inpatient hematologic cancer patients who experience malnutrition, a fall, or both.

	Q1 2023	Q2 2023	Q3 2023	Q4 2023	Q1 2024	Q2 2024	Total
Patients with malnutrition	38	43	18	9	25	22	155
Total # of falls	21	10	14	14	15	18	92
Fall AND malnourished	4	2	1	1	4	7	19
20% of all falls were malnourished patients; 12% of all malnourished patients fell							

Figure 2. Malnutrition characteristics of BCU/BMT population from January 2023 through June 2024.

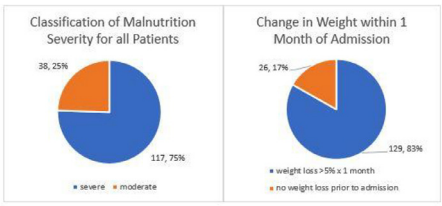
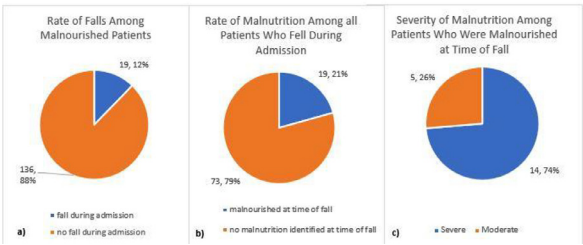


Figure 3. Patterns of malnutrition among BCU/BMT Unit patients who fell from January 2023 through June 2024.



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Utilizing Cryotherapy for Patients Receiving Busulfan As Preparative Therapy for HSCT

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Topic Significance & Study Purpose/Background/Rationale: Emerging literature from the Oncology Nursing Society suggests that cryotherapy may serve as an effective prophylactic intervention for the treatment of mucositis, specifically following the administration of Busulfan for allogeneic hematopoietic stem cell transplant conditioning. The team at St. David's South Austin Medical Center (SDSAMC) is interested in evaluating the efficacy of cryotherapy in mitigating mucositis within our own clinical practice. This investigation aims to optimize patient outcomes and enhance overall transplant tolerability.

Methods, Intervention, & Analysis: To better understand the number of patients that had received Busulfan at SDSAMC, a comprehensive chart review was completed including patient diagnosis, conditioning regimen, Busulfan AUC dose, age and pre-transplant comorbidities. Between 2016 and 2024, 52 patients received a Busulfan-containing conditioning regimen. There were 11 females and 41 males with most common indications for treatment being for AML and MDS. Knowing a significant number of patients had received a Busulfan containing regimen, a multidisciplinary team decision was made to explore cryotherapy.

A questionnaire was utilized for patient reported outcomes (PRO) (PLoS One, 2014) and a list of upcoming patients was formulated. Patients were asked to participate in the utilization of cryotherapy to minimize the risk of mucositis. Patients were instructed to initiate cryotherapy 90 minutes into a three-hour infusion with the peak distribution timing as outlined by the Oncology Nursing Society (Oncology Nursing Forum, 2022). Cryotherapy was continued for a duration of 120 minutes to the extent feasible for each patient. Nursing staff documented the initiation time, duration, and patient tolerance of cryotherapy within the chemotherapy notes. Subsequently, patients were asked to complete a seven-question questionnaire where they rated their mucositis symptoms on a scale of 0 to 5 (Figure 1.). These assessments were conducted on Day 0, Day +7, Day +14 and Day +21.

Findings & Interpretation: The analysis of these patients included an evaluation of the PROs, area under curve (AUC) dose, the max grade of mucositis as performed using the WHO criteria, the need for interventions i.e. patient controlled analgeisia (PCA), IV or oral analgesics, and discharge date. To date, 3 patients have been treated using cryotherapy (Figure 2.).

Discussion & Implications: While the sample size is small, SDSAMC will continue treat a larger size and utilize retrospective data to determine the overall impact to patients. The goal would be to see a reduction in the WHO mucositis grading score, decreased use of IV or oral analgesics and PCA pumps, and potentially shortened hospital stays.

Figure 1. Patient Report Outcomes Questionnaire

Question	Scale
1. Mouth pain (lips, cheeks, tongue, palate, throat)	0-5- no pain- worst possible pain
2. Difficulty speaking because of mouth sores	0-5 -no trouble speaking-impossible to speak
3. Difficultly eating hard foods because of mouth sores	0-5 no trouble eating hard foods-impossible to eat hard foods
4. Difficultly eating soft foods because of mouth sores	0-5 no trouble eating soft foods-impossible to eat hard foods
5. Difficulty drinking because of mouth sores	0-5 no trouble drinking- impossible to drink
6. Difficulty swallowing because of mouth sores	0-5 no trouble swallowing- impossible to swallow
7. Change in taste	0-5 no change in taste- complete change in taste

Figure 2. Patient Data

Diagnosis	Gender	Transplant Date	AUC Dose	Mucositis Grade	Interventions	DC Day	Cryotherapy/Questionnaire
AML	M	5/2020	5,000	2	IV Analgesics	18	No/No
MDS	M	5/2020	4,000	3	PCA-Days	28	No/No
CML	M	6/2020	5,000	1	Oral/IV Analgesics	21	No/no
AML	M	8/2022	5,000	3	IV Analgesics	14	No/No
AML	F	9/2022	5,000	3	PCA- 8 days	14	No/No
AML	M	1/2023	5,000	3	PCA- 7 days	20	No/No
AML	M	3/2024	5,000	3	PCA- 5 days	16	No/No
CML	M	3/2024	4,000	3	PCA- 5 days	17	No/No
AML	F	3/2024	5,000	4	PCA- 9 days	23	No/No
AML	F	6/2024	5,000	3	PCA- 3 days	18	Yes/Yes
MDS	M	6/2024	4,000	2	Oral/IV Analgesics	20	Yes/Yes
AML	F	6/2024	5,000	3	PCA- 3 days	16	Yes/Yes

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Thriving Beyond Treatment: First Annual Allogeneic Blood and Marrow Transplant Survivorship Day

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Topic Significance & Study Purpose/Background/Rationale: The Hans Messner Allogeneic Blood and Marrow Transplant program at the Princess Margaret Cancer Center (PMCC) was established in 1977. Since its inception over 3831 transplants have been performed. Inspired by the survivorship event run by the City of Hope in California, Dr. Mattsson, the program director, aimed to recreate at PMCC.

The goal was to honour patients, caregivers, and the multidisciplinary healthcare team. Of importance, Dr. Mattsson wanted the inpatient nursing team, who witness the complex and challenging phase of stem cell transplant, to see their impact and as well positive outcomes after transplant.

Methods, Intervention, & Analysis: In May of 2023 a planning committee was established, this included physicians, nurses, administrative assistants and an event coordinator. An outdoor venue was sought to accommodate our immunocompromised population.

Invitations were sent to patients who had undergone a transplant at least one year prior, these were disseminated via the patient portal, clinic visits, and phone. Patients with known musical talents were personally approached by the planning committee. Refreshments were chosen with the Canadian Food Guide to Safe Eating, and reviewed by our Registered Dietician. Meetings continued bi-weekly from May to September 2023. The event was funded through various sponsors, as there was no cost to attendees.

Findings & Interpretation: The event took place on September 27th 2023 at Black Creek Village in Toronto and was attended by 374 people. Speeches showcased a patient who celebrated her 35th anniversary since transplant. As well as, a patient who participated in our allo at home program, another transplanted for sickle cell disease and one who had recently traveled to Germany to meet her unrelated donor. In addition, a patient discussed the challenges his sibling donor faced traveling to Canada.

Performances included an opera singer patient who performed alongside one of our BMT physicians and a patient who played music with his quartette.

Discussion & Implications: In conclusion, the event was a success, patients found a powerful sense of community, with others who truly understood their journeys. Staff members were inspired, as they witnessed the resilience and vitality of life after transplant.

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Barriers and Facilitators to the Establishment and Maintenance of Long-Term Follow-up Clinics for Hematopoietic Cell Transplant Survivors in Japan

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Topic Significance & Study Purpose/Background/Rationale: In Japan, more hematopoietic cell transplantation (HCT) centers have established long-term follow-up (LTFU) clinics since partial reimbursement began as the post-transplant medical care fee in 2012. Barriers and facilitators to the establishment and operation of LTFU clinics may differ across institutions, regions, and types of patients served (adult or pediatric). To identify barriers and facilitators to the establishment and operation of LTFU clinics, we analyzed descriptive data obtained from a nationwide survey.

Methods, Intervention, & Analysis: We targeted 267 HCT centers (189 adult and 78 pediatric) certified by the Japanese Society for Transplantation and Cellular Therapy. The study protocol and a cover letter that includes access to the web-based questionnaire were mailed to the targeted centers in March 2024. Open-ended responses regarding difficulties, problems, solutions, and future needs at the time the LTFU clinic started and during its operation and maintenance were coded and categorized as descriptive data.

Findings & Interpretation: The response rate was 90% (239 of 267 centers); 49% (83 of 170) of adult departments and 49% (34 of 69) of pediatric departments provided open-ended responses. Barriers to opening LTFU clinics included staffing (especially nurses), workload, limited facilities and equipment, lack of understanding, need for cooperation within the facility, difficulty in developing LTFU structure and flow, and lack of patient awareness. During the operation phase, several process factors affected the quality of outpatient operations, including difficulties in dealing with various LTFU checklist items, information sharing and collaboration among LTFU staff and multiple professions and other departments, and training and maintaining the skills of LTFU staff. Healthcare providers in pediatric departments shared difficulties in implementing survivorship care with regard to improving patient understanding and independence and transitioning patients to adult or local facilities. Facilitating factors and future needs for establishing and maintaining LTFU clinics included continuous professional development of nurses, multidisciplinary resource development, inter-facility LTFU networking, intra-facility information sharing and multidisciplinary collaboration, regional collaboration that includes non-HCT facilities, use of electronic tools (e.g., e-PRO, apps, and templates), and increased patient autonomy.

Discussion & Implications: To further promote the establishment and operation of post-HCT LTFU clinics, standardization and professional development of staff members to support multidisciplinary team medicine, community collaboration, and transition to adult or community facilities as well as the use of electronic tools are next steps.

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Expanding Outpatient Administration of FDA Approved Immune Effector Cells to Decrease Utilization of Inpatient Resources and Hospital Length of Stay