



**Ontario Health**  
Cancer Care Ontario

## **Summary:**

# Recommendations for Enhancing the Delivery of Oncology Systemic Treatment in the Home and Community in Ontario

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# Standards

## Policies and Procedures

### EVIDENCE SUMMARY

- Cancer care is a complex, tightly coupled system, in which interdependencies are inherent. Updated policies and procedures bring consistency and standardization to all patient care operations and prevent failures that can have catastrophic effects such as permanent damage to the patient due to overdosage or compromising success in therapy with underdosage. (1,2)
- Appropriately written, executed, disseminated, and audited policies and procedures provide safe, consistent, and effective healthcare within an organization, and set the foundation for safe and high-quality patient care. An organization without a set of overarching principles would struggle to provide clarity when dealing with issues critical to patient safety, health administration, staff responsibilities, legal obligations and regulatory requirements. (3,4)
- Well-defined emergency protocols help providers and staff efficiently and appropriately assess and respond to treatment related oncologic emergencies that may result in devastating outcomes. (5)
- Improper storage or transportation of pharmaceutical products can make some drugs ineffective, and can be harmful or life-threatening to the patients who rely on these products. (6)
- Audits are effective ways for organizations to regularly and consistently examine and improve the quality of their services. Audits highlight discrepancies between a particular standard and actual practice, identifying changes needed for system improvement. (7)
- Protocols not developed in a standardized format are particularly prone to error because crucial information required for safe administration will be difficult to find. (8)

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### RECOMMENDATION 1:

HCCSS and SPOs shall have clearly written policies in alignment with their involvement in STIHC including:

- a) Systemic cancer treatment administration in the home, including:
  - Administration of systemic cancer treatment drugs inclusive of all relevant routes of administration;
  - Documentation requirements;
  - Communication between Pharmacy, Systemic Treatment Facilities and other Service Providers;
  - Independent double checks at point of care; and
  - First doses

- b)** Safe handling and disposal of systemic cancer treatment agents/waste, including:
- Transport and storage of systemic cancer treatment drugs;
  - Risk management;
  - Provider and patient health and safety;
  - Education/training of all staff and patients/caregivers;
  - Equipment required in the home to support administration of systemic cancer treatment agents/waste, including personal protective equipment;
  - Management of extravasation;
  - Management of spills; and
  - Management/transport of waste including contaminated body waste and laundry
- c)** Central/peripheral vascular access devices
- d)** Actions to take in the event of adverse events/medication incidents including:
- Prevention;
  - Early detection;
  - Management;
  - Monitoring;
  - Reporting;
  - Systematic process for tracking/reporting incidents electronically;
  - Identifying areas for system improvement and safeguards; and
  - Reviewing all critical medication events using a multidisciplinary approach
- e)** Standardized transitions of care, including information sharing/review of:
- Pre-treatment assessment by providers;
  - Patient assessment prior to systemic cancer treatment administration;
  - Treatment plan information;
  - Current patient status;
  - Assessment for and maintenance of access devices required for administration;
  - Ongoing training and education program for all providers; and
  - Incident learnings

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**RECOMMENDATION 2:**

HCCSS and SPOs shall have a clearly written policy to ensure the following information is available for all STIHC providers, prior to administration of STIHC:

- Informed consent has been obtained and/or documented for STIHC as per organizational standard operating procedures (SOP) (e.g., treatment consent, consent to share information/privacy);
- Treatment intent (adjuvant, neoadjuvant, palliative, curative);
- Patient diagnosis and status information;
- Prescribed treatment(s);
- Medical history/co-morbidities;
- Physical care/psychosocial needs;
- Requirements for lab work;
- Self-care capability; and
- Ability to follow directions and learn technical skills

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**RECOMMENDATION 3:**

HCCSS and SPOs shall have a SOP for identifying and documenting:

- Which pharmacy is responsible for the clinical verification of the cancer treatment plan and medication orders (e.g., the oncology pharmacist within the Systemic Treatment Facility or Pharmacy SPO preparing the medication);
- When lab parameters and/or treatment conditions need to be checked, including timing (e.g., prior to each treatment administration, every 3 months), and how recent the results must be;
- How lab results will be shared and communicated to all STIHC providers as required; and
- Who is responsible for checking that lab parameters and/or treatment conditions are appropriate for the patient to receive STIHC

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**RECOMMENDATION 4:**

HCCSS and SPOs shall have well defined emergency response procedures including:

- Immediately accessible emergency kits containing treatment information, dressings, antiseptics, supportive medications, contact information of healthcare providers etc.;
- Ability to access an oncology trained healthcare provider anytime as needed;
- When and who should be called in specific circumstances (oncologist or other provider); and
- Documentation and bi-directional communication processes

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**RECOMMENDATION 5:**

Pharmacy SPOs shall have a clearly written policy to ensure that STIHC medications are transported safely, securely and under the appropriate storage conditions for each drug. HCCSS shall have a clearly written policy to support Pharmacy SPOs in their safe transport of STIHC medications and validate Pharmacy SPOs have such a policy in place.

- Measures must be in place to ensure all medications are maintained within the required temperature range as stated by the manufacturer during transport.
  - Any drug that requires refrigeration, or cold chain protection, shall be kept at the appropriate temperature during transportation and promptly placed in a refrigerator upon receipt by the patient.
- Signature by the patient or agent upon receipt is required unless there is a valid reason for not signing.

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**RECOMMENDATION 6:**

HCCSS and SPOs shall have audit and evaluation processes for the following:

- Training and education requirements for STIHC providers including documentation of all training in a learning portfolio; and
- Patient experience

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**RECOMMENDATION 7:**

Organizations should be subject to an accreditation process.

- Findings of deficiencies pertaining to STIHC (e.g., communication of information relevant to patient care, incident reporting, appropriate training, and re-certification of STIHC providers etc.) shall be addressed with plan of action in a transparent manner.

# Safety

## Systemic Treatment Practice Standards

### EVIDENCE SUMMARY

- Chemotherapeutic agents have a narrow therapeutic window and high toxicity. Medication errors with these agents, coupled with the health status of the patient, can lead to significant harm or, in some cases, death. To mitigate risks, organizations should look for any patient risk factors, assess the risks within the medical environment, and inform the patient of these risks before deciding whether to administer STIHC. (8,9)
- Errors associated with infusion pumps are consistently one of the top 10 hazards on the Emergency Care Research Institute’s annual list. Limiting the variety of systemic cancer therapy infusion pumps and clearly labelling easy-to-follow instructions on all infusion pumps support patient safety and minimize medical-device-associated adverse events that could result in significant injury or death. (7,10,11)
- A lack of appropriate oversight and inadequate processes and procedures for the development, review and publication of chemotherapy protocols can lead to significant patient harm. (12)
- Independent double checks have a pivotal role in error detection strategies and can be part of a valuable defense to prevent potentially harmful errors from reaching patients. (13–15)
- Verbal orders offer more room for error than orders that are written or sent electronically. Additionally, once a verbal order is received, it must be transcribed as a written order; this adds further complexity and risk to the ordering process. (16–20)

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### RECOMMENDATION 8:

HCCSS and SPOs shall consider the following prior to administration of STIHC:

- Patient/caregiver readiness (e.g., patient has a desire and is motivated to receive STIHC);
- Required patient/caregiver education/teaching;
- Diagnosis (e.g., patient’s diagnosis is appropriate for STIHC);
- Patient characteristics (both physical and psychological) and co-morbidities;
- Treatment regimen and the risk of complications with the proposed treatment (e.g., patient’s systemic cancer treatment is appropriate for STIHC);
- Hospital proximity (e.g., patient has access to 24-hour emergency department); and
- Home environment (e.g., patient has living accommodations which are conducive to self-care, such as access to clean water and electricity, ability to call for help or communicate with health care providers)

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**RECOMMENDATION 9:**

HCCSS and SPOs ideally in collaboration with Systemic Treatment Facilities, shall maintain a list of:

- Drugs eligible for delivery in the home/community; and
- Drugs at high risk for infusion reactions including hypersensitivity reactions and local site reactions (e.g., extravasation, irritation, flare)

When generating the approved lists, the following criteria shall be considered for each drug:

- Safety factors:
  - Drug/treatment regimen toxicity (vesicant or irritant);
  - Complexity of drug/treatment regimen; and
  - Staff education requirements
- Practical factors:
  - Drug/treatment regimen transportation factors;
  - Drug/treatment regimen stability and storage factors;
  - Drug/treatment regimen preparation factors; and
  - Time required by staff to provide service
- Administration protocols shall be obtained or prepared by HCCSS and SPOs (ideally in collaboration with Systemic Treatment Facilities) for each regimen administered in the home/community and reviewed/shared with STIHC providers on an ongoing basis.

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**RECOMMENDATION 10:**

New treatment protocols for STIHC should be established, ideally in collaboration with Systemic Treatment Facilities, following a standard review as per organizational SOPs and development of the standard regimen. Provincial guidelines and recommendations (e.g., Ontario Health (Cancer Care Ontario) best practice guidelines and recommendations) should be continuously referenced in the development of standard regimens promoting quality and consistent care. Refer to Appendix D.

- Deviations from standard protocol recommendations should be clearly documented in order to facilitate safe care delivery involving STIHC providers.

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**RECOMMENDATION 11:**

Administration of drugs that have a high risk of infusion reactions shall only be administered and monitored in a Systemic Treatment Facility.

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**RECOMMENDATION 12:**

All STIHC medications shall undergo an independent double check for treatment and equipment programming.

- Independent double checking shall be completed by the clinician administering STIHC and another health care provider with appropriate knowledge, skills and training to perform this function. Discrepancies shall be addressed prior to administration and completion of the independent double check shall be documented.

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**RECOMMENDATION 13:**

Spill kits shall be provided to a patient/caregiver by the clinician/team initiating the administration of STIHC.

- STIHC providers shall confirm:
  - A spill kit is readily available in the patient’s home prior to administration of STIHC; and
  - Patient/caregiver has been provided with training and verbal/written instructions for spill kit use
- If a spill kit is unavailable, patients must have the following items on hand until a spill kit becomes available:
  - Two pairs of nitrile or latex gloves;
  - One surgical mask;
  - Detergent or soap solution;
  - Paper towels; and
- Two garbage bags (double-bag) to dispose of the above

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**RECOMMENDATION 14:**

Ideally, a limited number of suppliers should be sourced for the procurement of supplies and equipment for home/community care (e.g., regional standardization of infusion pump type and brand).

- If this is not possible, STIHC providers shall be comprehensively trained, educated and proficient on all available supplies and equipment for home/community care (e.g., infusion pump types and brands used within their organization).

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**RECOMMENDATION 15:**

Verbal orders shall not be accepted for STIHC except to hold, delay or discontinue the treatment in which case, the instructions should be noted on the order followed by a counter signature/electronic signature by the prescriber. “No refills” or “No part fills” shall be specified on all orders. New orders or changes to orders shall be made in writing and reviewed by an oncology pharmacist in a timely manner, to avoid delivery of medication being delayed.



# Drug Preparation/Delivery

## EVIDENCE SUMMARY

- Medication safety practices have greater significance when hazardous drugs are provided and may need to be more stringent. STIHC requires the same strict checking of procedures used for hazardous drugs administered in the hospital. (21–23)
- To ensure the integrity of the product and safety of the patient and staff, hazardous drugs should be prepared, stored and transported using appropriate equipment and by individuals appropriately trained on safe handling practices. (6,21)

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### RECOMMENDATION 16:

HCCSS shall ensure that contracted Pharmacy SPOs providing STIHC have the following:

- Training on cancer and systemic cancer treatment medications for community pharmacy staff;
- Access to Systemic Treatment Facilities' protocols for systemic cancer treatments and patient treatment plans;
- Clearly documented communication pathways with the Systemic Treatment Facility;
- A link to the pharmacists at the Systemic Treatment Facility to provide support to the community pharmacy team; and
- A referral system that safely delivers bi-directional key patient information in a confidential way back to the Systemic Treatment Facility

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### RECOMMENDATION 17:

Pharmacy SPOs shall follow regulatory standards for compounding of sterile and non-sterile preparations (e.g., National Association of Pharmacy Regulatory Authorities).

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### RECOMMENDATION 18:

IV systemic therapy agents shall not be stored for long periods in community settings, either during transport or in a patient's home.

- Systemic therapy shall not be held in transport for more than 4 hours and will be dependent on the stability of each individual medication.
- IV systemic therapy shall:
  - Not be stored in a patient's home for more than 2 days;
  - Appropriately labelled with storage information; and
  - Be accompanied with proper storage instructions to be provided to the patient

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**RECOMMENDATION 19:**

Orders for same day administration should be discouraged. STIHC providers require a minimum of 24 hours to process STIHC referrals/orders.

- Systemic therapy medications that are required for same day administration and cannot be delivered and administered within the required time frame shall be prepared/administered in the Systemic Treatment Facility.

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**RECOMMENDATION 20:**

HCCSS and Pharmacy SPOs shall ensure that hazardous drugs are labelled appropriately and transported by individuals who have received appropriate training (e.g., certification for the transportation of dangerous goods, use of spill kits) and who have spill kits immediately accessible.

## Patient Monitoring

### EVIDENCE SUMMARY

- Protocols and procedures that enhance patient safety and reduce variation in service delivery prevent delays and undertreatment of adverse events that can result in poorer adherence to treatment, impaired health related quality of life, increased health service use, and mortality. (7,24–27)
- Proactive symptom assessments and clearly defined reporting channels may help clinicians manage toxicities between visits and address toxicities before they become severe and require Emergency Department visits or hospitalization. (24–26)

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**RECOMMENDATION 21:**

Evidence-based protocols shall be readily accessible and utilized for the management of symptoms, side effects, and oncological emergencies.

- Protocols should provide details on appropriate assessment intervals and grading of adverse effects using a recognized toxicity grading system (e.g., Common Terminology Criteria for Adverse Events (CTCAE)).

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**RECOMMENDATION 22:**

HCCSS and SPOs shall report back to the Cancer Care team promptly if there are:

- Adverse drug reactions;
  - Adverse events should be graded using a recognized toxicity grading system (e.g., CTCAE); and
  - Medication infusions should be stopped immediately if any adverse reaction occurs
- Systemic cancer therapy related incidents;
- Device-related complications;

- Problems with adherence to STIHC drugs;
- Spills;
- Potentially severe near misses; and
- Change in patient- and condition-related factors (e.g., cognitive decline)

Information should be documented and shared with all STIHC providers through established communication channels.

## Incident Reporting

### EVIDENCE SUMMARY

- Incident reports highlight errors that occur throughout the medication use process and are used to identify opportunities for improving patient safety. (1,23,28,29)
- Incident reports should be reviewed and analyzed by a dedicated team of patient safety specialists to identify the most important risks to patient safety and coordinate incident learnings for successful accident reduction. (30)
- Under reporting of incidents results in inconsistent investigational approaches and action planning, hindering effective risk reduction and shared learnings to improve safety. (29–31)

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### RECOMMENDATION 23:

HCCSS and SPOs shall track near misses and/or medication incidents with a review and system improvement process.

- Aggregate information from near misses and/or medication incidents should be readily accessible and shared with all health care providers for incident learning across the STIHC care delivery system.

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### RECOMMENDATION 24:

Near misses and/or medication incidents (including spills) shall be reported to incident-based reporting systems (e.g., local reporting systems, Canadian Medication Incident Reporting and Prevention System (CMIRPS) Program, safemedicationuse.ca) as per organizational SOPs.

# Coordination

## Roles and Responsibilities

### EVIDENCE SUMMARY

- Role clarity is a crucial issue for effective interprofessional collaboration. Poorly defined roles can become a source of conflict in clinical teams, reduce the effectiveness and quality of care and services delivered and result in poor patient experiences as well as gaps in care. (19,23,32)

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### RECOMMENDATION 25:

Organization and team roles and responsibilities shall be formalized as indicated:

#### Systemic Treatment Facility\*

- Develop and communicate an individualized systemic cancer treatment plan to HCCSS' care coordinators.
- Ensure labs are ordered, lab parameters are appropriate for the patient to receive STIHC and results are sent to the HCCSS care coordinators for sharing with the SPOs.
- Provide the following patient education (verbal and written) related to STIHC using a multi-disciplinary approach which may include nurses, physicians and pharmacists:
  - Diagnosis;
  - Intent of treatment;
  - Short and long-term effects (including any patient specific side effects experienced with treatment in the Systemic Treatment Facility);
  - Management of side effects;
  - How to manage IV/oral treatments in the home including recognizing pump malfunction;
  - Appropriate medication storage conditions;
  - Use of spill kits; and
  - Disposal/safe handling
- Ensure consultative oncology clinicians (e.g., oncologist, specialist cancer nurses, and clinical pharmacists) are available for advice, consultation and remote support.
- Complete a standard intake form (Resource Matching and Referral) and associated orders and submit to the HCCSS' care coordinator.
- Obtain and document consent for STIHC.
- Assess/manage treatment related toxicities.
- Maintain internal system of incident reporting while fulfilling the requirement of reporting critical incidents related to medication/IV fluids to National System for Incident Reporting (NSIR).
- Report severe adverse events related to medications/devices to Health Canada as part of the Protecting Canadians from Unsafe Drugs Act (Vanessa's Law).

## HCCSS and SPOs

- Oversee ongoing development and maintenance of standardized protocols and procedures that support STIHC.
  - Standardized protocols should be developed in collaboration with the Systemic Treatment Facilities to ensure consistency and quality throughout the STIHC care continuum.
- Ensure there are processes in place to enable auditing/monitoring of clinical and service outcomes.

## HCCSS' Care Coordinators

- Determine ability to accept patient for STIHC (e.g., eligibility for nursing, supplies, and equipment).
- Develop a personalized service/care plan which details the patient's STIHC care needs and full complement of home and community services to meet those needs.
- Conduct assessment to identify any actual/potential risk factors that may compromise patient or nurse safety (e.g., environmental hazards, issues related to drug transportation or disposal of waste etc.).
- Coordinate the referral process and organize all aspects of patient care. Ensure:
  - Complete referral form received from Systemic Treatment Facility;
  - Consent is complete and documented;
  - A new complete systemic cancer treatment order is received for each STIHC administration;
  - Elements of the systemic cancer treatment plan required for safe administration of STIHC are documented including:
    - Patient diagnosis and status information;
    - Medical history/co-morbidities;
    - Medication history;
    - Presence or absence of allergies and history of other hypersensitivity reactions; and
    - Prescribed treatment(s) (e.g., systemic cancer treatment protocol)
  - Provision of supplies, medications and equipment;
  - Patient/caregiver received education regarding treatment plan, adverse effects and complications of therapy and appropriate management;
  - Patient/caregiver received education on drug delivery system, appropriate medication storage conditions, venous access device, systemic cancer treatment drug precautions and home spills (including who to notify for replacement if a spill kit is used);
  - Patient/caregiver's understanding of education provided;
  - Link patients to appropriate STIHC providers to address identified gaps in education and answer outstanding questions;
  - SPO nurse requested pump pick-up at the end of each STIHC administration;
  - Documentation is completed; and
  - Patient/caregiver is informed of who and when to call for on-going help
- Communicate regularly through established shared documentation channels with health care providers to provide/receive updated information and/or clarifications.

- Consider/share all assessments and information from healthcare providers in accordance with legislation and expressed patient consent.
- Coordinate emergency situations in accordance with policies, emergency response procedures and emergency preparedness.
- Ensure there is the ability to contact consultative oncology providers (e.g., oncologist, specialist cancer nurses, and clinical pharmacists) for advice, consultation, remote support and referral.
- Ensure SPOs are aware of communication channels between organizations and consultative oncology providers.
- Regularly reassess patient's STIHC needs, review requirements and revise the client's Home and Community service/care plan as necessary.

### SPO Nurse

- Complete oncology specific training and demonstrate ongoing competency in oncology care.
  - Level of training should be dependent on role in STIHC (e.g., initiation, administration and monitoring versus monitoring and discontinuing only).
- Review, assess and accept STIHC referrals from HCCSS.
- Develop a nursing service plan.
- Communicate with STIHC providers to provide/receive updated information and/or clarifications.
- Prior to administration of STIHC:
  - Conduct environmental health and safety assessment to confirm personal and patient safety;
  - Confirm patient consent is completed and documented;
  - Confirm clear prescription documented;
  - Confirm medication has been stored within the required temperature range as stated by the manufacturer in the patient's home (e.g., medication that requires refrigeration was promptly placed in a refrigerator upon receipt by the patient);
  - Confirm a spill kit or appropriate substitute items are readily available;
  - Conduct patient assessment (confirm using at least 2 patient identifiers), consider:
    - Patient status;
    - Co-morbidities;
    - Patient medication history;
    - Patient allergies; and
    - Any pre-existing symptoms
  - If initiating STIHC, confirm lab parameters is within acceptable range for dosing and perform independent double-check of treatment and equipment (if applicable);
  - Confirm and reinforce education provided by the Systemic Treatment Facility and Pharmacist and address outstanding patient questions; and
  - Provide patient with details regarding:
    - Contact information of home care nurse;
    - Expected care and service; and
    - Who and when to call for on-going assistance

- Monitor and communicate risks as per protocols, adverse drug effects, allergic/infusion reactions and patient status to HCCSS' care coordinators and Systemic Treatment Facilities as appropriate.
- Discard all systemic cancer treatment waste per appropriate disposal protocols.
- Communicate significant changes in patient status and adverse effects to the HCCSS' care coordinators as appropriate in accordance with legislation and any expressed patient consent.
- Complete documentation in patient's health record including:
  - Systemic cancer treatment administered, dose, rate, date and time;
  - Teaching completed;
  - Instructions provided to patient/caregiver;
  - Medical device used;
  - Site inspection;
  - Patient tolerance/response;
  - Follow up plan; and
  - Communication with physician
- Document, report and share patient assessment data and changes to medications in a timely manner with STIHC providers.

\*The roles, responsibilities and expectations of the Systemic Treatment Facilities included in this document are not comprehensive. This document only includes recommendations that specifically support systemic treatment in the home and community. Systemic Treatment Facilities are to follow all appropriate guidelines, recommendations and standards defined by Ontario Health (Cancer Care Ontario).

## Standardized Transition/Communication

### EVIDENCE SUMMARY

- Poor communication and communication failures can lead to medication errors that have the potential to cause severe injury or unexpected patient death. Standardized communication tools and structured communication techniques ensure accuracy of complex information, increase consistency, minimize duplication, decrease risk of medication errors, promote patient safety and overall, lead to improved patient experience and quality of care. (7,19,23,33)
- Effective teamwork can immediately and positively affect patient safety and outcome. It minimizes medical errors, near misses and other adverse events caused by miscommunication. (7,19,23,34)
- Treatment or service care plans improve clarity and prevent duplication. They promote patient safety and ensure consistent communication between all members of the patient's care team, and serve as a roadmap to help patients navigate their treatment journey, improving quality of care and patient experience. (7,19,23,35)

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**RECOMMENDATION 26:**

HCCSS and SPOs shall have a formal communication plan for sharing information such as:

- Care plans;
- Dose changes;
- Adverse reactions;
- Incidents;
- Preparation;
- Administration guidelines;
- Confirmation of receipt of orders; and
- Education provided to patient from home care nurses, care coordinators and the care team at the Systemic Treatment Facility respectively

Communications should ideally be coordinated via a single point of contact in each organization.

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**RECOMMENDATION 27:**

STIHC providers shall have and be trained on standardized communication tools. Ideally there shall be a single point of contact within each organization to manage communications (e.g., HCCSS care coordinator, designated SPO nurse or manager etc.).

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**RECOMMENDATION 28:**

Multi-disciplinary STIHC providers from SPOs, HCCSS and Systemic Treatment Facilities should jointly establish and participate in case conferences to facilitate integrated care for all eligible STIHC patients as required (e.g., complex cases).

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**RECOMMENDATION 29:**

A copy of the original systemic cancer treatment order shall be readily accessible and accompany any documentation from the HCCSS and SPOs. Any changes in treatment shall be clearly documented in the patient's file and accompanied by a new order communicated through current portals from the Systemic Treatment Facility to the community partners.



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**RECOMMENDATION 30:**

HCCSS and SPOs shall have an established standardized referral process (e.g., referral form) at all transition of care points to support continuity of care and information transfer. The form should contain at minimum:

- Patient demographic information;
- Diagnosis/stage of cancer;
- Co-existing medical conditions;
- Treatment/protocol;
- Lab parameters;
- Allergies;
- Current medications; and
- Contact of referring provider

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**RECOMMENDATION 31:**

STIHC providers shall have access to the patient's treatment plan, including:

- Copies of the most current treatment order, including drug, dose, frequency, diluents, amount of diluent, method and sequencing of administration, length/rate of administration, scheduling and interval of therapy and duration of therapy;
- Lab parameters and frequency the physician has ordered;
- Infusion pump programming sheet (if applicable);
- Lab requisition (if applicable); and
- Medication information sheet

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**RECOMMENDATION 32:**

HCCSS' care coordinators and SPO nurses shall have access to and be trained on the use of ConnectingOntario ClinicalViewer portals to support a comprehensive picture of care.

# Education

## Training and Education for Providers

### EVIDENCE SUMMARY

- New cancer treatments and service models are continually evolving. Healthcare organizations have a responsibility to ensure all staff maintain their skills and competency relevant to their role and current scope of practice in cancer therapy and that the introduction of new services and treatments are supported by education, where needed, to ensure continued delivery of high quality cancer care. (12,13,15,23,36,37)
- The type of continuing professional development must reflect the role and responsibilities of the staff member and be relevant to their current scope of practice. Insufficient training and education in new service models or protocols can compromise safe delivery of treatment. (12,13,15,23,36,37)
- Treatment delivered in the community is given without the direct presence of specialist medical support. For this reason, nurses expected to administer this care must be given specific, relevant training and be deemed competent and experienced enough to manage all possible outcomes safely. (38)
- Care of patients with cancer is complex and encompasses a wide range of skills. Inadequate education regarding cancer and cancer treatments can be detrimental to the provision of safe, high quality comprehensive care to patients and their families. It is vital for staff involved in providing safe cancer care to be able to recognize treatment side-effects, symptoms or changes in a patient's overall health status. (36,38,39)

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### RECOMMENDATION 33:

STIHC providers shall be trained on organization policies and practices.

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### RECOMMENDATION 34:

Health care providers (including personal support workers and rehabilitation therapists) involved in one or more of prescribing, handling, preparing, administering, dispensing, patient education and/or monitoring of STIHC shall have oncology specific training and demonstrate ongoing competence in oncology care.

- Oncology specific training should be tailored to the health care provider's role in STIHC (e.g., appropriate disposal of systemic cancer treatment waste).
- Organizations shall determine the required level of training for health care providers in alignment with competency standards outlined by their regulating bodies.

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**RECOMMENDATION 35:**

HCCSS and SPOs shall ensure that providers are appropriately trained and maintain the knowledge and skills required for their job function, including but not limited to:

- Ensuring safety in compounding, preparing and dispensing STIHC medications;
- Patient counselling and education;
- Contents contained within and use of a spill kit;
- Preventing, managing and reporting of side effects/adverse events and medication incidents using standardized tools, where available; and
- Training related to care of, and identification of complications including extravasation, phlebitis, infiltration, flare reaction, hypersensitivity/infusion and allergic reactions which are monitored in collaboration with the patient

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**RECOMMENDATION 36:**

HCCSS and SPOs shall ensure that care coordinators and nurses have access to updated educational and training materials when new or unfamiliar agents, protocols or equipment are utilized or when procedures change.

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**RECOMMENDATION 37:**

HCCSS and SPOs shall have a standard mechanism for providing opportunity for, and monitoring of, continued competence. Annual competence assessment or verification is recommended.

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**RECOMMENDATION 38:**

HCCSS should have established mentorship pathways with Systemic Treatment Facilities to support SPOs and community staff in initial oncology specific training and continued competence.

# Training and Education for Patients and Caregivers

## EVIDENCE SUMMARY

- Educating patients with cancer about their oncology medications is an important component of therapy. Education has been shown to benefit and positively impact patients by equipping them with the skills for self-management and improve adverse effect monitoring and treatment adherence. (40–42)
- Education resources should provide timely, consistent, and personalized information, using an array of teaching strategies tailored to individual patient needs to foster compliance, decrease anxiety and stress, and build trust. (43,44)

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### RECOMMENDATION 39:

Systemic Treatment Facilities, HCCSS' and SPOs shall provide patients/caregivers with educational resources aligned with their learning needs, abilities, preferences, and readiness to learn.

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### RECOMMENDATION 40:

SPOs shall review/reinforce the following information (verbal and written) with patients/caregivers:

- Diagnosis;
- Intent of treatment;
- Treatment plan;
- Side effects;
- How to manage systemic cancer treatment medications/supplies and equipment in the home including recognizing pump malfunction, storage, disposal, and safe handling; and
- Regimen- or drug-specific risks or symptoms that require notification and emergency contact information, including:
  - How to contact the practice or organization;
  - Who should be called in specific circumstances (oncologist or other provider); and
  - Symptoms that should trigger a call
- Safe handling of cancer drugs and bodily fluids, (e.g., Ontario Health (Cancer Care Ontario)'s: [How to Safely Handle Cancer Medications and Body Fluids at Home](#));
- What to expect during treatment; and
- Expected outcomes

If identified knowledge gaps cannot be addressed, SPOs shall notify HCCSS care coordinators to liaise patient with appropriate health care provider(s) for additional counselling.

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**RECOMMENDATION 41:**

HCCSS shall provide/reinforce patient education related to:

- Individualized service/care plan;
- When/what systemic cancer treatment supplies will be delivered to the home (e.g., spill kits, gowns, catheters etc.); and
- Who and when to call for on-going help

# References

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