

POGO

PEDIATRIC ONCOLOGY GROUP OF ONTARIO

**FOR KIDS WITH CANCER
FOR NOW, FOR LIFE.**



POGO Nursing Telepractice Guidance Document

For Pediatric Oncology Nurses



Published May 2010

Revised May 2016, Revised October 2018, Revised March 2019

© Pediatric Oncology Group of Ontario, 2010

All rights reserved. Without limiting the rights under copyright reserved above, no part of this publication may be reproduced, stored in or introduced into a retrieval system or transmitted in any form or by any means (electronic, mechanical, photocopying, recording or otherwise) without the prior written permission of the copyright owner.

The educational materials herein are believed to be valid as of March 2019. Clinical decisions must always be individualized, and POGO assumes no liability for the use of these materials by patients or health professionals.

Table of Contents

POGO Telephone Nursing Practice Task Force	1
About POGO	3
Telepractice and the Pediatric Oncology Nurse	5
Introduction	5
Background	5
Development	6
Implementation and Evaluation	6
Conclusion and Special Thanks	6
Standards that Govern Oncology Nurses	8
I. CNO Professional Standards	8
II. CNO Practice Guideline: Telepractice	9
III. CANO Standards of Care	10
Constipation Assessment and Guidance	12
Diarrhea Assessment and Guidance	17
Chicken Pox Exposure Assessment and Guidance	22
Nausea and Vomiting Assessment and Guidance	26
Fever Assessment and Guidance	32
Mucositis Assessment and Guidance	36
Acute Pain Assessment and Guidance	42
Appendix A	48
Telepractice Communication Principles and Techniques	48
Telephone Personality	48
Voice Quality	49
Barriers to Effective Communication	49

Listening Skills	50
Interview Strategies	50
Call Closure	52
Common Pitfalls in Telephone Communication	52
Beware of Red Flags	53
Communication Challenges	53
Challenging Callers	53
Emergency Situations	54
Refusal to Follow Advice	54
Frequent or Constant Callers	54
Obscene Calls	54
References	55
Appendix B	58
Case Scenario #1: Neuroblastoma	58
Case Scenario #1: Answers	62
Case Scenario #2: Febrile Neutropenia	63
Case Scenario #2: Answers	65
Case Scenario #3: Nausea and Vomiting	66
Case Scenario #3: Answers	68
Appendix C	69
Nursing Telepractice Documentation Record	69

POGO Telephone Nursing Practice Task Force

Contributors

Denise Mills (Chair), NP, RN (EC), MN, CPHON®

Pediatric Oncology Group of Ontario, Toronto
The Hospital for Sick Children, Toronto

Mary Jo De Courcy (Past Chair), RN (EC), NP (Pediatrics), MScN, CPHON®

Children's Hospital, London Health Sciences Centre, London

Christine Armstrong, RN (EC), MScN, NP (Pediatrics) (Ret.)

The Hospital for Sick Children, Toronto

Patti Bambury, RN, BScN (Ret.)

Grand River Hospital, Kitchener-Waterloo Campus, Kitchener

Julie Constantin, RN, BScN

The Hospital for Sick Children, Toronto

Barbara Dageman, RN, BScN (Ret.)

Children's Hospital, London Health Sciences Centre, London

Bruna DiMonte, RN, BScN

Pediatric Oncology Group of Ontario, Toronto

JoAnn Duckworth, RN, BScN

McMaster Children's Hospital, Hamilton Health Sciences, Hamilton

Marilyn Eves, RN

McMaster Children's Hospital, Hamilton Health Sciences, Hamilton

Anna Geraldtes, RN, BScN (Ret.)

Trillium Health Partners, Credit Valley Hospital, Mississauga

Maryanne Gibson, RN, BScN (Ret.)

Kingston Health Sciences Centre, Kingston General Hospital Site, Kingston

Tina Hamalainen, RN, BScN

The Hospital for Sick Children, Toronto

Eleanor Hendershot, RN (EC), BScN, MN

McMaster Children's Hospital, Hamilton Health Sciences, Hamilton



Brennah Holley, RN, BScN

Children's Hospital of Eastern Ontario, Ottawa

Lisa Honeyford, RN, MN, CPHON®

The Hospital for Sick Children, Toronto

Patty Jansen, RN, BScN, CON(C), CHPCN(C)

Kingston Health Sciences Centre, Kingston General Hospital Site, Kingston

Lindsay Jibb, RN, BScN, BSc Honours (Biology), MSc, PhD

Lawrence S. Bloomberg Faculty of Nursing, University of Toronto, Toronto

The Hospital for Sick Children, Toronto

Janie Lappan, RN, BScN

McMaster Children's Hospital, Hamilton Health Sciences, Hamilton

Kathy Skelly, RN, BScN

Trillium Health Partners, Credit Valley Hospital, Mississauga

Allison Starr, RN, BScN, BSc, MN

The Hospital for Sick Children, Toronto

Denise Stregger, RN, BScN

The Hospital for Sick Children, Toronto

Jocelyne Volpe, RN, NP (Paediatrics), BScN, MN

The Hospital for Sick Children, Toronto

Kaniska Young Tai, RN, BScN, CPHON®

The Hospital for Sick Children, Toronto





About POGO

Founded in 1983, [Pediatric Oncology Group of Ontario \(POGO\)](#) works to ensure that everyone affected by childhood cancer has access to the best care and support. We partner to achieve the best childhood cancer care system for children, youth, their families and survivors in Ontario and beyond. POGO champions childhood cancer care and is the official advisor to Ontario's Ministry of Health on children's cancer control and treatment. [The Childhood Cancer Care Plan: A Roadmap for Ontario 2018-2023](#) is the fifth provincial pediatric oncology plan led by POGO.

POGO is a collaboration of the five specialty pediatric oncology programs within academic tertiary hospitals in Ontario¹ and the community hospitals and cancer centres that deliver POGO programs, including:

- Patient care programs (i.e. the [POGO Provincial Pediatric Oncology Satellite Clinic Program](#) and [POGO Pediatric Interlink Community Cancer Nurses Program](#))
- Supportive programs for families during active cancer treatment (via the [POGO Financial Assistance Program](#))
- Survivor care programs (including long-term follow-up clinics in the [POGO AfterCare Program](#) and academic and employment counselling through the [POGO School and Work Transitions Program](#))

POGO also plays an important role in providing researchers, hospitals and the Ministry with the most up-to-date and accurate population-based childhood cancer surveillance statistics to inform childhood cancer control policies and high-quality patient care. As part of POGO's mandate for advancing and

¹ Our five tertiary hospital partners are: Children's Hospital of Eastern Ontario (Ottawa); Children's Hospital, London Health Sciences Centre (London); The Hospital for Sick Children (Toronto); Kingston Health Sciences Centre, Kingston General Hospital Site (Kingston); and McMaster Children's Hospital, Hamilton Health Sciences (Hamilton).

monitoring the childhood cancer system, POGO has, since 1985, actively and prospectively collected sociodemographic, diagnostic, therapeutic and outcome data on each new case of childhood cancer diagnosed and treated at one of the five specialty pediatric oncology programs in Ontario through the [Pediatric Oncology Group of Ontario Networked Information System \(POGONIS\)](#).





Telepractice and the Pediatric Oncology Nurse

Introduction

The face of healthcare delivery has changed. Hospital stays have become shorter and there is a trend towards more ambulatory nursing care. Clients and their families have to assume more responsibility for their own care. For the parents of a child diagnosed with cancer this can be a frightening time, as they find themselves in the home with minimal support. Telephone access to a skilled healthcare professional is essential for these families in providing ongoing quality care.

As a result of this shift in care, nurses working in pediatric oncology identified that not only were they managing symptoms over the phone, but also their knowledge and expertise were needed to provide/clarify information, to advise and to educate. However, no developed guidelines were in place to assist these nurses in their telephone practice.

Background

The [Pediatric Oncology Group of Ontario \(POGO\) Pediatric Oncology Nursing Committee](#) organized a workshop with the purpose of developing guidelines to assist nurses in their telephone practice. In 2006, eight pediatric nurses representing POGO-affiliated hospitals and a POGO Satellite Clinic met and formed a POGO Telephone Nursing Practice Task Force (POGO Task Force) to review the College of Nurses of Ontario (CNO) expectations regarding telephone practice, *Practice Guideline: Telepractice* (2017). Additionally, the POGO Task Force met to develop guidelines based on current best practice in the literature. These standardized guidelines would then be available and utilized by nurses caring for clients and their families both in the hospital and community.

Prior to the first workshop, the document *Telephone Nursing Practice and Symptom Management Guidelines* (2004), developed by the Nursing Professional Advisory Committee for Cancer Care Ontario (CCO), was circulated. Permission to use this document to serve as a template for the development of the pediatric oncology guidelines was obtained from Esther Green, RN, MSc, Chair of the Nursing Professional Advisory Committee.

Development

At the first workshop, the group identified seven guidelines that they felt represented key areas of concern for clients and families following discharge: Nausea and vomiting, fever, diarrhea, constipation, pain, stomatitis/mucositis, and chicken pox exposure. Guidelines were assigned to each centre for development following a review of the literature. Follow-up meetings were scheduled for final reviews of completeness and ease of use.

Why are guidance documents so important? Doesn't every nurse "know" what to do when conversing with clients/family members on the phone? Those are important questions to consider and the working group discussed them at length. They came to understand that there were no standards that guided oncology nurses in telephone practice, acknowledging that the assessment and advice that a nurse gives to a potentially ill client is crucial. Fever in an immune-compromised client is not a simple issue, nor is diarrhea in a young child. Each situation must be managed appropriately and advice given that is not only credible, but also based on the current literature. Safety of clients is an essential element of quality care and we wanted to strive for and achieve safe, effective care for every client.

Implementation and Evaluation

The goal of this Task Force is to ensure that this telepractice guidance document is available to all POGO partner centres and their satellites where care is provided to children with cancer. We recognize that there are many nurses in the community who also provide care to these children in their homes. For these nurses, the telepractice guidance document will be available on the POGO website.

Cancer Care Ontario (CCO) evaluated their guidelines at several points during development and considered two factors: The utility of the guidelines in busy practice settings and the ease of use for practicing nurses. The POGO Task Force also considered these two factors during the development of this telepractice guidance document. The POGO Task Force plans to evaluate the telepractice guidance document and documentation record one year after it is launched to assess its usefulness, the completeness of the record and if other standardized symptom guidelines require development.

Conclusion and Special Thanks

In developing this standardized telepractice guidance document, the POGO Task Force will assist nurses in client symptom management based on best practice. The documentation record will ensure



consistency and continuity within the client’s plan of care, while promoting safe and effective quality of care to clients.

The POGO Task Force would also like to acknowledge and thank Dr. Mark Greenberg (POGO Senior Clinical Lead, Strategic Initiatives), Argerie Tsimicalis (former POGO Fellow) and the Quality Utilization and Patient Care Committee at The Hospital of Sick Children for their review of this document. In 2019, a review of the document was undertaken by the POGO Pediatric Oncology Nursing Committee to perform a literature review ensuring the current best telepractice standards are upheld, reflected and maintained throughout the document. In consultation with the POGO Guidelines Program, the decision was made to rename this document and project to be titled *POGO Nursing Telepractice Guidance Document for Pediatric Oncology Nurses*.



A handwritten signature in cursive script that reads "Mary Jo De Courcy".

Mary Jo De Courcy, RN (EC), NP (Pediatrics), MScN, CPHON®
Past Chair, POGO Telephone Nursing Practice Task Force
Pediatric Oncology Group of Ontario, Toronto
Nurse Practitioner, Pediatric Hematology/Oncology
Children’s Hospital, London Health Sciences Centre, London



A handwritten signature in cursive script that reads "Denise Mills".

Denise Mills, NP, RN (EC), MN, CPHON®
Chair, POGO Telephone Nursing Practice Task Force
Co-Chair, POGO Pediatric Oncology Nursing Committee
POGO Provincial Clinical Lead, Pediatric Oncology Nursing
Pediatric Oncology Group of Ontario, Toronto
Nurse Practitioner, Pediatric Oncology, Solid Tumour, New Agents and
Innovative Therapy, MIBG
The Hospital for Sick Children, Toronto



Standards that Govern Oncology Nurses

Oncology nurses who are involved in telephone practice are required to incorporate the following Professional Standards in their practice. These Professional Standards include:

- I. **The College of Nurses of Ontario (CNO) Professional Standards**
https://www.cno.org/globalassets/docs/prac/41006_profstds.pdf
- II. **The College of Nurses of Ontario (CNO) Telepractice Standards**
https://www.cno.org/globalassets/docs/prac/41041_telephone.pdf
- III. **Canadian Association of Nurses in Oncology (CANO) Standards of Care**
https://cdn.ymaws.com/www.cano-acio.ca/resource/resmgr/standards/Standards_of_Care_ENG.pdf

I. CNO Professional Standards

https://www.cno.org/globalassets/docs/prac/41006_profstds.pdf

All standards of practice provide a guide to the knowledge, skills, judgment and attitudes that are needed to practice safely. They describe what each nurse is accountable and responsible for in practice. Standards represent performance criteria for nurses and can clarify the nursing scope of practice for the public and other healthcare professionals. Standards can be used to stimulate peer feedback, to encourage research to validate practice and to generate research questions that lead to improvement of health care delivery. Finally, standards aid in developing a better understanding and respect for the various and complementary roles that nurses have (College of Nurses of Ontario, 2018).

The following seven Professional Standards describe in broad terms the professional expectations for nurses and apply to all nurses, in every area of practice, including telepractice:

- **Accountability**
- **Continuing competence**
- **Ethics**
- **Knowledge**
- **Knowledge application**
- **Leadership**
- **Relationships**
 - Therapeutic nurse-client relationships
 - Professional relationships

II. CNO Practice Guideline: Telepractice

https://www.cno.org/globalassets/docs/prac/41041_telephone.pdf

The College of Nurses of Ontario (CNO) defines nursing telepractice as the delivery, management and coordination of care and services provided via information and telecommunication technologies. This may include telephones, personal digital assistants (PDA), faxes, internet, video and audio conferencing, teleradiology, computer information and telerobotics. Telepractice can occur in many settings, including hospitals, ambulatory care, call centres, clients' homes, emergency departments, insurance companies, visiting nursing agencies and public health departments (College of Nurses of Ontario, 2017).

The CNO outlines the following principles to guide nurses' practice and accountabilities in telepractice:

Principles of Nursing Telepractice:

- **Principle 1:** Therapeutic nurse-client relationships
- **Principle 2:** Providing and documenting care
- **Principle 3:** Roles and responsibilities
- **Principle 4:** Consent, privacy and confidentiality
- **Principle 5:** Ethical and legal considerations
- **Principle 6:** Competencies



III. CANO Standards of Care

https://cdn.ymaws.com/www.cano-acio.ca/resource/resmgr/standards/Standards_of_Care_ENG.pdf

Under the auspices of the Canadian Association of Nurses in Oncology (CANO), adult and pediatric oncology nurses have delineated the Standards of Care to which Canadians with cancer are entitled. These standards are client-focused statements to ensure that all individuals with a diagnosis of cancer and their families receive the same level of care and expertise from the nurses who care for them.

Nurses must integrate the nine Standards of Care listed below in their scope of practice:

Standard 1: Individualized and holistic care

Individuals with cancer and their family are entitled to care that is individualized, holistic and responsive to and respectful of individual differences, such as (but not limited to) developmental, physical, cultural, spiritual, social, economic, philosophical, political or gender differences.

Standard 2: Family-centred care

Individuals with cancer and their family are entitled to care that is family-centred, incorporates growth and the developmental needs of each member and is respectful of the family's resources and coping style.

Standard 3: Self-determination and decision-making

Individuals with cancer and their family have the right to self-determination, the right to access information, the right to make decisions about their health-care and the right to have an advocate, if they are unable or choose not to participate in decision-making.

Standard 4: Navigating the system

Individuals with cancer and their family are entitled to care that is respectful of and responsive to their community of living. A community of living includes home, work, school, circle of friends, family and the community in which the individual lives. Individuals with cancer and their families are entitled to assistance in navigating through the care and health care systems. Navigation begins when the person first enters the cancer care system, receives treatment and care, returns to their own community and re-enters the system at any point along the continuum of care.

Standard 5: Coordinated, continuous care

Individuals with cancer and their family are entitled to care that is coordinated among providers and across the continuum of cancer control (prevention, screening, early detection, pre-diagnosis, treatment, survivorship and palliation).

Standard 6: Supportive, therapeutic relationship

Individuals with cancer and their family are entitled to a supportive, knowledgeable, caring and therapeutic relationship with care providers throughout their cancer experience.

Standard 7: Evidence-based care

Individuals with cancer and their family are entitled to care that is based on theory and science (physiologic and psychosocial sciences) and incorporates principles of evidence-based practice, best practice or available evidence.

Standard 8: Professional care

Individuals with cancer and their family are entitled to care that is professional and incorporates ethical principles and legislative requirements.

Standard 9: Leadership

Individuals with cancer and their family are entitled to care within a system that has client-focused, professional leadership.

For the full text, please refer to the [Canadian Association of Nurses in Oncology's Toolkit](#) for understanding and applying standards of care, roles in oncology nursing and role competencies (2017).



Constipation Assessment and Guidance

Definition

Constipation: Infrequent, excessively hard, and dry bowel movements resulting from a decrease in rectal filling or emptying.

Other Terms Used: “bloated,” “bowel problems,” “no poop”

General Assessment

- Name, age, DOB, physician
- Name of caller/relationship
- Diagnosis, on or off treatment
- Type of treatment: Recent surgery, chemotherapy, radiation location, HSCT
- Last blood counts
- Current medications
- Allergies
- Pharmacy name, telephone number, and address
- Number for call back

Symptom Assessment – Guiding Questions

- How is your child acting right now?
- What is the date of your child’s last bowel movement? What is your child’s normal number of stools/day?
- Under normal circumstances, what is the frequency, consistency, and color (or liquid seepage) of your child’s stool?
- What is your child’s present food and fluid intake?
- What is your child’s current activity level?
- What narcotic is your child currently on?
- What treatment is being used for constipation? Is it effective?

Associated Symptoms:

- a) What is your child’s pain level?
- b) Does your child have any cramping?
- c) Is the child experiencing nausea and/or vomiting? If vomiting, what is the colour, odour, consistency, and amount?
- d) Does your child have abdominal distention/rigidity?
- e) Is your child passing gas?
- f) Is there urinary retention?
- g) Does your child have any anal fissure/perianal sores?
- h) Is there a presence of blood in stool or with cleansing?
- i) Is your child experiencing any sensory loss?
- j) Does your child have motor weakness?



Emergent

- Severe abdominal pain +/- nausea or vomiting
- Fecal-smelling vomit
- Rigid abdomen
- History of recent abdominal surgery
- Sensory loss +/- motor weakness
- [Fever](#)
- Rectal bleeding



**Requires Immediate
Medical Attention**

Urgent

- Increased nausea, vomiting
- Increasing abdominal pain, distension
- No bowel movements for greater than 3 days
- Blood in stool
- Presence of fissure, perianal sores



**Requires Medical Attention
within the Next 4-6 Hours**

Non-Urgent

- Dry or hard stools +/- abdominal pain
- History of immobility
- Increased anorexia
- Decreased fluid intake
- Bowel regime not followed as prescribed
- No bowel movement for 2 days
- Passing gas



**Support, Teaching, and Follow-
Up, As Required**



Client/Family Member Teaching

Diet:

- Increase fibre: Whole grain products, bran, fresh fruit, raw vegetables, raisins, popcorn (as long as study protocol allows modifications or additions of any diet/fluid)
- Increase fluid intake (age-appropriate)
- Limit consumption of gas-producing foods: Cabbage, beans, green peppers

Bowel Regime:

- Review stool softeners and laxatives prescribed
- Ensure proper use of daily bowel regime
- Emphasize importance of daily bowel program, particularly if on constipating agents (opioids, Ondansetron, Vincristine, etc.)
- Allow sufficient time
- Provide privacy
- Reduce distractions
- Do not place anything in rectum (e.g. suppositories, thermometers, enemas, fingers)

Activity:

- Increase activity level, as able
- Warm bath

Follow-Up/Evaluation/Documentation

- Record date and time of telephone encounter
- Record assessment, interventions, and any follow-up plans

- Refer to LHIN Homecare Services or other appropriate colleagues as indicated (e.g. dietician)
- If non-urgent, reinforce with client to call back within 24 hours if symptoms do not improve or begin to deteriorate
- Reinforce with parent to seek immediate medical attention if any emergent symptoms appear
- Review with parent how to seek immediate medical attention

Potential Complications

- Bowel obstruction
- Rectal tearing, fissure, hemorrhage
- Fecal impaction
- Metabolic disturbance
- Inadequate absorption of oral drugs
- Infection/Typhlitis

Risk Factors/Possible Causes

Oncologic Emergency: Consider spinal cord compression

Pharmacologic Agents: Opioid analgesics, chemotherapeutic agents (Vincristine, Vinblastine), some antiemetics (Ondansetron), anticonvulsants

Pathological Causes: Bowel obstruction or non-mechanical obstruction (e.g. paralytic ileus, complication of Graft versus Host Disease)

Extrinsic Factors: Diet, dehydration, lack of privacy, anxiety



References

- Alberta Health Services. (2015). *Nutrition Guideline Healthy Infants and Young Children GI Function: Management of Constipation*.
<https://www.albertahealthservices.ca/assets/info/nutrition/if-nfs-ng-healthy-infants-gi-function-management-constipation.pdf>.
- Atlantic Provinces Pediatric Hematology/Oncology Network. (2017). *Clinical Practice Guideline on the Management of Constipation in Children with Cancer*.
<http://apphon-rohppa.com/en/system/files/documents/guidelines/FINAL%20Constipation%20Guideline%202017.pdf>.
- Baggott, C., Fochtman, D., Foley G.V., Kelly K.P. (Eds.). (2011). *Nursing Care of Children and Adolescents with Cancer and Blood Disorders*. 4th Ed. Chicago, IL: Association of Pediatric Hematology/Oncology Nurses.
- Baggot, C.R., Kelly, K.P., Fochtman, D., and Foley, G.V. (2002). *Nursing Care of Children and Adolescents with Cancer*. 3rd Ed. Philadelphia, PA: W.B. Saunders, Co.
- Barker, C.C., Anderson, R.A., Sauve, R.S., and Butzner, J.D. (2005). "GI Complications in Pediatric Patients Post-Bone Marrow Transplant." *Bone Marrow Transplant*, 36, 51-58.
- Bisanz, A. (1997). "Managing Bowel Elimination Problems in Clients with Cancer." *Oncology Nursing Forum*, 24, 679-688.
- Chase, J.W., Homsy, Y., Siggaard, C., Sit, F., and Bower, W.F. (2004). "Functional Constipation in Children." *The Journal of Urology*, 171, 2641-2643.
- Cimprach, B. and Marciniak, K. (1997). "A Model for Prioritizing Chemotherapy Assessment and Teaching - The University of Michigan's PCAT Model." *Oncology Nursing Forum*, 24, 455-456.
- Constipation Guideline Committee of the North American Society for Pediatric Gastroenterology. (2006). "Evaluation and Treatment of Constipation in Infants and Children: Recommendations of the North American Society for Pediatric Gastroenterology, Hepatology and Nutrition." *Journal of Pediatric Gastroenterology and Nutrition*, 43(3), 1-13.
- https://journals.lww.com/jpgn/Fulltext/2006/09000/Evaluation_and_Treatment_of_Constipation_in.28.aspx.
- Cope, D.G. (2001). "Management of Chemotherapy-Induced Diarrhea and Constipation." *Nursing Clinics of North America*, 36, 695-707.
- Dest, V. (1997). "Managing Constipation Caused by Chemotherapy." *R.N.*, 60, 6.
- Glare, P. and Lickiss, J.M. (1992). "Unrecognized Constipation in Clients with Advanced Cancer: A Recipe for Therapeutic Disaster." *Journal of Pain and Symptom Management*, 7, 369-371.
- Herring, R.A. (2019). *The Pediatric Chemotherapy and Biotherapy Curriculum*. (4th ed.). Chicago, IL: Association of Pediatric Hematology/Oncology Nurses.
- Hicks, A. (2001). "The Prevention and Management of Constipation." *Journal of Orthopaedic Nursing*, 5, 208-211.
- Itano, J.K. and Taoka, K.N. (2005). *Core Curriculum for Oncology Nursing*. (4th ed.). Philadelphia, PA: W. B. Saunders, Co.
- Kline, N. E. (Ed.). (2009). *Essentials of Pediatric Oncology Nursing: A Core Curriculum* (3rd ed.). Glenview, IL: Association of Pediatric Hematology/Oncology Nurses.
- Kline, N. E. (Ed.). (2014). *Essentials of Pediatric Hematology/Oncology Nursing: A Core Curriculum* (4th ed.). Glenview, IL: Association of Pediatric Hematology/Oncology Nurses.
- Langhorne, M., Fulton, J., and Otto, S. (2007). *Oncology Nursing*. (5th ed.). St. Louis, MO: Mosby, Inc.
- McCaffey, M. and Pasero, C. (1999). *Pain: Clinical Manual*. (2nd ed.). St. Louis, MO: Mosby, Inc.
- Nurko, S. and Zimmerman, L.A. (2014). Evaluation and treatment of constipation in children and adolescents. *American Family Physician*, 90 (2) 82-90.
<https://www.aafp.org/afp/2014/0715/p82.pdf>.



Plaisanie, L. and Ellis, J.A. (2002). "Opioid-Induced Constipation, Management is Necessary but Prevention is Better." *American Journal of Nursing*, 102, 72-73.

Polovich, M., White, J., and Kelleher, L. (Eds.). (2005). *Chemotherapy and Biotherapy Guidelines and Recommendations for Practice*. (2nd ed.). Pittsburg, PA: Oncology Nursing Society.

Provincial Health Services Authority-BC Cancer. (2010). *Symptom Management Guidelines: CONSTIPATION*. <http://www.bccancer.bc.ca/nursing-site/Documents/3.%20Constipation.pdf>.

Rodgers, C., Wills-Alcoser, P., Monroe, R., McDonald, L., Trevino, M., and Hockenberry, M. (2008). "Growth Patterns and Gastrointestinal Symptoms in Pediatric Patients after Hematopoietic Stem Cell Transplantation." *Oncology Nursing Forum*, 35, 443-448.

Woolery, M., Bianz, A., Lyons, H.F., Gaido, L., Yenulevich, M., Fulton, S., and McMillan, S.C. (2008). "Putting Evidence into Practice: Evidence-Based Interventions for the Prevention and Management of Constipation in Patients with Cancer." *Clinical Journal of Oncology Nursing*, 12(2), 318-333. doi 10.1188/08.CJON.317-337.

Xu, C.F., Zhu, L.X., Xu, W.M., Chen, W.C., and Wu, D.P. (2008). "Endoscopic Diagnosis of Gastrointestinal Graft vs. Host Disease." *World Journal of Gastroenterology*, 14, 2262-2267.

Diarrhea Assessment and Guidance

Definition

Diarrhea: An abnormal increase in quantity, frequency, and fluid content of stool, often associated with urgency, perianal discomfort, and incontinence.

Other Terms Used: “loose stools,” “loose BMs,” “runs,” “liquid poop”

General Assessment

- Name, age, DOB, physician
- Name of caller/relationship
- Diagnosis, on or off treatment
- Type of treatment: Recent surgery, chemotherapy, recent administration of Irinotecan, radiation location, HSCT
- Last blood counts
- Current medications
- Allergies
- Pharmacy name, telephone number, and address
- Number for call back



Symptom Assessment – Guiding Questions

- How is your child acting right now?
- What is the onset, duration, and volume of diarrhea?
- In the last 24 hours, how many stools did the client have? What was the consistency, colour, and odour of the stool?
- Was mucous or blood present? If yes, how much?
- What is the child's normal bowel pattern? Does the client have an ostomy?
- Does the child have any associated cramps, gas, abdominal pain, distension, or tenesmus (ineffectual straining)?
- Does the child have any other symptoms (e.g. nausea, vomiting, thirst, dry mouth or skin, dizziness, fever, skin irritation around anus or stoma, weight changes, level of activity, increased lethargy)?
- What treatment is being used for diarrhea? Is it effective?
- Was the child on any recent antibiotics or recently hospitalized?
- Indicate if past history or recent stool cultures have been obtained. Which cultures? What infection?
- If on chemotherapy, when was it last received (date and time)? What type of chemotherapy?
- Is the child on any dietary supplements or herbal medication?
- If on radiation, what area was it performed and how many?
- Is the child receiving chemotherapy and radiation together?
- Were there any recent changes in normal eating pattern (e.g. eating out, introduction of new foods)?
- Is the child on enteral feeds?

- If client is able to drink and keep fluids down? If yes, how much in quantity and what type of fluid?
- Does diarrhea occur following oral intake? What oral intake?
- How much urine does the child have and what is the character of urine? How many wet diapers?
- Are there any signs and symptoms of dehydration? If client is a baby, do they have decreased tears?
- Does the child have any past history of Graft versus Host Disease and/or any recent change in therapy for Graft versus Host Disease (e.g. weaning of steroids, weaning of Cyclosporine)?
- Are any other family members unwell?
- Has the child or the parents traveled outside of the country or been in contact with visitors from outside of the country?

For BMT (Bone Marrow Transplant) clients:

- How many number of days post-transplant?
- Do they have any past history of Graft versus Host Disease? Where?
- Are they currently receiving steroids for GVHD? If yes, what is the dose? Has there been any recent change in dose?
- What is the past and current immune suppression regime? What are the most recent therapeutic drug monitoring levels?
- Is the client receiving IV hydration at home? If yes, what and how much?

Emergent

- Lethargy or change in level of consciousness
- Increase in respiratory rate or respiratory distress
- Sudden onset of confusion
- Severe abdominal or rectal pain, +/- vomiting
- Rectal bleeding
- [Fever](#)



**Requires Immediate
Medical Attention**

Urgent

- Increasing frequency and volume of stools per day with no significant fluid intake for 24 hours
- Presence of blood or mucous in stools
- Not able to tolerate adequate fluids
- Skin breakdown
- No urine output in 12 hours (8 hours for child younger than 1 year)



**Requires Medical Attention
within the Next 4-6 Hours**

Non-Urgent

- Increase from baseline (normal) stools per day
- Some cramping
- Able to tolerate adequate amounts of fluids
- Diarrhea with normal urine output
- Diarrhea associated with the use of stool softeners or laxatives



**Support, Teaching, and Follow-
Up, As Required**



Client/Family Member Teaching

- Adjust diet by decreasing fibre (fresh fruit, vegetables, bran, nuts and seeds) and by eliminating milk, milk products, caffeine, and chocolate. Infants/toddlers may continue to breastfeed and/or drink formula
- Fluid intake, as tolerated and age-appropriate, and eat frequent small meals of cooked fruits/vegetables, rice, lean meat, fish, chicken, bananas, applesauce, toast (as long as study protocol allows modifications/additions of diet/fluid)
- Anti-diarrheal medications are not indicated for acute infectious diarrhea
- If child on Irinotecan, refer to institutional policies
- Encourage oral rehydration solutions (e.g. Pedialyte® products)
- Good perianal hygiene after each bowel movement: Barrier creams (as needed), loose and/or no undergarments, frequent changing and avoidance of harsh diaper wipes if in diapers
- Increase frequency of hand washing by client and caregivers

Follow-Up/Evaluation/Documentation

- Record date and time of telephone encounter
- Record assessment, interventions, and any follow-up plans
- Refer to LHIN Homecare Services or other appropriate colleagues as indicated (e.g. dietician)
- If non-urgent, reinforce with client to call back within 24 hours if symptoms do not improve or begin to deteriorate

- Provide medical team with information regarding treatment of Irinotecan-induced diarrhea (e.g. Atrophine, Loperamide +/- Cefixime), if appropriate
- Reinforce with parent to seek immediate medical attention if any emergent symptoms appear
- Review with parent how to seek immediate medical attention

Potential Complications

- Malnutrition, dehydration
- Electrolyte imbalance
- Typhlitis
- Colitis
- Reduced absorption of oral medications (e.g. flare up of Graft versus Host Disease may affect absorption of anti-rejection drugs)
- Disrupted skin integrity
- Infections
- Sleep disturbances, fatigue
- Abdominal pain
- Obstruction

Risk Factors/Possible Causes

- Abdominal or pelvic radiation
- Chemotherapy
- Infection
- Transplant regime
- Use of alternative therapies (dietary supplements, herbal remedies)
- Antibiotics, laxatives, antacids, NSAIDs
- Diet, enteral tube feedings
- Graft versus Host Disease



References

- American Dietetic Association and Dieticians of Canada. (2000). *Manual of Clinical Dietetics*. (6th ed.). Chicago, IL: American Dietetic Association.
- Atlantic Provinces Pediatric Hematology/Oncology Network. (2017). *Guidelines on the Prevention and Management of Chemotherapy Associated Diarrhea*. <http://www.apphon-rohppa.com/en/system/files/documents/guidelines/FINAL%20diarrhea%20guideline%20-2017.pdf>.
- Baggott, C., Fochtman, D., Foley, G.V., and Kelly, K.P. (Eds.). (2011). *Nursing Care of Children and Adolescents with Cancer and Blood Disorders*. 4th Ed. Chicago, IL: Association of Pediatric Hematology/Oncology Nurses.
- Baggot, C. R., Kelly, K.P., Fochtman, D., and Foley, G.V. (Eds.). (2002). *Nursing Care of Children and Adolescents with Cancer*. (3rd ed.). Philadelphia, PA: W.B. Saunders.
- Barker, C.C., Anderson, R.A., Sauve, R.S., and Butzner, J.D. (2005). "GI Complications in Pediatric Patients Post Bone Marrow Transplant." *Bone Marrow Transplant*, 36, 51-58.
- Basch, A. (1987). "Changes in Elimination." *Seminars in Oncology Nursing*, 3, 287-292.
- Bisanz, A. (1997). "Managing Bowel Elimination Problems in Clients with Cancer." *Oncology Nursing Forum*, 24(4), 679-688.
- Bisanz, A., Tucker, A.M., Amin, D.M., Patel, D., Calderon, B.B., Joseph, M.M., et al. (2010). "Summary of the Causative and Treatment Factors of Diarrhea and the Use of a Diarrhea Assessment and Treatment Tool to Improve Patient Outcomes." *Gastroenterology Nursing*, 33, 268-281.
- Benson, A.B., Ajani, A.J., Catalano, R. B., Engelking, C., Kornblau, S. M., Martenson Jr., J. A., McCallum, R., Mitchell, E. P., O'Dorisio, T. M., Vokes, E.E., Wadler, S. (2004). "Recommended Guidelines for the Treatment of Cancer Treatment-Induced Diarrhea." *Journal of Clinical Oncology*, 22(14), 2918-2926.
- Cope, D.G. (2001). "Management of Chemotherapy-Induced Diarrhea and Constipation." *Nursing Clinics of North America*, 36, 695-707.
- Hogan, C. (1988). "The Nurse's Role in Diarrhea Management." *Oncology Nursing Forum*, 25, 879-886.
- Kline, N. E. (Ed.). (2009). *Essentials of Pediatric Oncology Nursing: A Core Curriculum* (3rd ed.). Glenview, IL: Association of Pediatric Hematology/Oncology Nurses.
- Kufe, D.E., Pollock, R.E, Weichselbaum, R.R., Bast, Jr., R.C., and Gansler, T.S. (Eds.). (2003). "Principles of Oncology Nursing." In *Cancer Medicine* (6th ed., pp. 967-968). Hamilton, Ontario: B.C. Decker
- Oncology Nutrition Dietetic Practice Group. (2006). *The Clinical Guide to Oncology Nutrition*. (2nd ed.). Chicago, IL: American Dietetic Association.
- Polovich, M., White, J., and Kelleher, L. (Eds.). (2005). *Chemotherapy and Biotherapy Guidelines and Recommendations for Practice*. (2nd ed.). Pittsburg, PA: Oncology Nursing Society.
- Provincial Health Services Authority-BC Cancer. (2010). *Symptoms Management Guidelines: Diarrhea*. <http://www.bccancer.bc.ca/nursing-site/Documents/Symptom%20Management%20Guidelines/3Diarrhea.pdf>.
- Rodgers, C., Wills-Alcoser, P., Monroe, R., McDonald, L., Trevino, M., and Hockenberry, M. (2008). "Growth Patterns and Gastrointestinal Symptoms in Pediatric Patients after Hematopoietic Stem Cell Transplantation." *Oncology Nursing Forum*, 35, 443-448.
- Xu, C.F., Zhu, L.X., Xu, W.M., Chen, W.C., and Wu, D.P. (2008). "Endoscopic Diagnosis of Gastrointestinal Graft vs. Host Disease." *World Journal of Gastroenterology*, 14, 2262-2267.
- Yarbro. C.H., Frogge, M.H., and Goodman, M. (2004). *Cancer Symptom Management*. (3rd ed.). Boston, MA: Jones and Bartlett.



Chicken Pox Exposure Assessment and Guidance

Definition

Chicken Pox: An acute, highly contagious viral disease caused by a herpes virus, varicella zoster virus (VZV). Incubation period (period of time between exposure to a disease and onset of symptoms) for VZV is 10 to 21 days. Exposure is defined as close contact with an infectious person, such as close indoor contact (e.g. in the same room) or face-to-face contact. (Lopez, A. and Marin, M., 2008).

Follow your institutional guidelines for management of chicken pox exposure.

General Assessment

- Name, age, DOB, physician
- Name of caller/relationship
- Diagnosis, on or off treatment
- Type of treatment: Recent surgery, chemotherapy, radiation location, HSCT
- Last blood counts
- Current medications
- Allergies
- Pharmacy name, telephone number, and address
- Number for call back

Symptom Assessment – Guiding Questions

- How is your child acting right now?
- If available, what is client's VZV titre status? Any history of VZV infection and VZV vaccine?
- Was the client exposed to someone diagnosed with chicken pox (confirmed by a doctor)? If yes, on what date did the contact break out with chicken pox and what period of time was the client exposed to the infectious person?
- Is the client post-transplant or on steroids or any immunosuppressant?
- Does the client have a rash? If yes, indicate the start date.
- Describe the rash: Location (back, chest, then to face and extremities, rarely on soles and palms) and itchiness. Are the bumps filled with fluid or are they dry or reddened? Is the rash only located in one area, as a cluster (more typical of shingles) and is there associated pain?
- Does the client have a fever and any symptoms of malaise, mild headache, or decreased appetite?
- Does the client have shortness of breath or abdominal pain?
- Was the client recently admitted for antiviral treatment or is the client on Acyclovir, Ganciclovir, or other antiviral medication?



Emergent

- If the client is on treatment (receiving chemotherapy, steroids, and/or immunosuppressants) OR within 6 months off treatment OR 1 year post-transplant with either:
 - [Fever](#)
 - Lesions
 - Infected lesion



**Requires Immediate
Medical Attention**

Urgent

- Immune-compromised (neutropenic and/or post-transplant) and exposed to infectious individual



**Requires Medical Attention
within the Next 72 or 96 Hours
(Dependent on Hospital Policy)
from Exposure to Receive VZIG**

**For BMT Clients, Requires
Medical Attention within
48 Hours**

Non-Urgent

- Contact outside of the infectious period



**Support, Teaching, and Follow-
Up, As Required**

Client/Family Member Teaching

- If the client has a clinic appointment or is going to hospital emergency room, they need to be isolated. Alert ER or clinic staff upon arrival
- For patients where Varicella Zoster Immune Globulin (VZIG) is recommended, dosing will be ordered by the medical team
- If contact occurs, isolation period **without** VZIG is from Day 8 to 21, isolation period **with** VZIG is from Day 8 to 28
- Chicken Pox is an illness that presents with fever and associated malaise and vesicular rash that is located mostly on the trunk and head. The rash typically lasts 4-5 days
- Immunocompromised children are at risk of developing severe disease

Follow-Up/Evaluation/Documentation

- Record date and time of telephone encounter
- Advise MD, ER of incoming immune-compromised client
- Record assessment, interventions, and any follow-up plans (e.g. completing course of oral antivirals upon discharge)
- If non-urgent, review signs and symptoms of chicken pox and reinforce with client to call back if symptoms appear
- Reinforce with parent to seek immediate medical attention if any emergent symptoms appear
- Review with parent how to seek immediate medical attention

Potential Complications

- Localized or systemic infection, sepsis
- Secondary skin infections most often due to staphylococcus aureus
- Shingles (reactivation of VZV)
- Pain
- Scarring
- Bleeding (if thrombocytopenic)
- Delay of therapy

Risk Factors/Possible Causes

- Immune-compromised individual
- Lack of previous immunity
- Daycare or school setting
- Siblings/family member with no history of chicken pox or vaccine immunization



References

- American Academy of Pediatrics Committee on Infectious Diseases. (2009). *Red Book: 2009 Report of the Committee on Infectious Diseases*. (28th ed.). Grove Village, IL: American Academy of Pediatrics.
- Association for Professionals in Infection Control and Epidemiology. (2016). *APIC Text of Infection Control and Epidemiology Guidelines*.
- Health Canada. www.hc-sc.gc.ca.
- Kimberlin, D.W., Brady, M.T., Jackson, M., & Long, S.S. (Eds.) (2018) *Red Book: 2018 Report of the Committee on Infectious Disease* (31st ed.). Elk Grove Village, IL: American Academy of Pediatrics.
- Kline, N.E. (Ed.). (2007). *Essentials of Pediatric Oncology Nursing: A Core Curriculum* (3rd ed.). Glenview, IL: Association of Pediatric Hematology/Oncology Nurses.
- Lopez, A., and Marin, M. (2008). *Strategies for the Control and Investigation of Varicella Outbreak*. Retrieved May 5, 2010, from cdc.gov. The Official Web Site of the Centers for Disease Control and Prevention: <https://www.cdc.gov/chickenpox/outbreaks/downloads/manual.pdf>.
- Myers M.G., Seward J.F., and LaRussa P.S. (2007). "Varicella-Zoster Virus." In Kliegman, R.M., Behrman, R.E., Jenson, H.B., and Stanton, B. (Eds.), *Nelson Textbook of Pediatrics*, 18th ed. (chap. 250). Philadelphia, PA: WB Saunders.
- Red Book*. American Academy of Pediatrics – Report of the Committee of Infectious Diseases (2015).

Nausea and Vomiting Assessment and Guidance

Definition

Nausea:	The sensation of the need to vomit. The sensation may or may not result in vomiting.
Vomiting:	The forceful expulsion, through the mouth, of contents of the stomach. (Hedstrom, Haglund, Skolin, and von Essen, 2003)
Other Terms Used:	“retching,” “dry heaves,” “sick to stomach,” “pukey,” “throw up,” “tummy hurts”

General Assessment

- Name, age, DOB, physician
- Name of caller/relationship
- Diagnosis, on or off treatment
- Type of treatment: Recent surgery, chemotherapy, radiation location, HSCT
- Last blood counts
- Current medications
- Allergies
- Pharmacy name, telephone number, and address
- Number for call back



Symptom Assessment – Guiding Questions

- How is your child acting right now?
- Is the client experiencing tachycardia (rapid heartbeat), pallor, weakness, diaphoresis, or dizziness?
- Is the child experiencing abdominal pain or are they irritable and inconsolable?
- When did the vomiting begin?
- When the child vomits, what is the frequency and quantity? Is it forceful?
- Is there a pattern to the vomiting (e.g. morning, after meals)?
- What is the date of last chemotherapy treatment and what did it consist of?
- What is the colour and texture of the emesis? Is there evidence of bleeding, frank blood, coffee grounds, or bile?
- What is the client's temperature (high or low can indicate a problem)?
- How many wet diapers did the child have in the last 24 hours? If the client has been going to the bathroom, what is the frequency and quantity?
- What does the urine look like (colour, cloudy, odour, etc.)?
- When was the client's last stool? What was its consistency?
- Determine how long client has been experiencing nausea. Has anything helped relieve it?
- Is the client taking any anti-emetics? What is the regimen and the time last dose was given?
- How much has the client had to drink in the last 24 hours?

- Has the client been eating and maintaining adequate nutrition? Any changes in diet?
- Does the client have a nasogastric tube? Is it still in place?
- Are there any other associated symptoms (e.g. pain, recent injury)?
- Determine if the client is on any oral medications (e.g. oral chemotherapy, electrolyte supplements). Are they able to take them? Any recent changes in medications?
- Did the client have any sick contacts?
- Has the client's schedule recently changed (e.g. going back to school)?
- Does the child have a Ventriculoperitoneal shunt (VP shunt) or Ommaya reservoir?

For BMT (Bone Marrow Transplant) clients:

- How many days post-transplant?
- Past history of Graft versus Host Disease. Where?
- Are they currently receiving steroids for GVHD? If yes, what is the dose? Has there been any recent change in dose?
- What is the past and current immune suppression regime? What are the most recent therapeutic drug monitoring levels?
- Is the client receiving IV hydration at home? If yes, what and how much?

Emergent

- Change in level of consciousness, confusion, not responsive, lethargy, dizzy
- Severe abdominal pain or headache
- Recent injury to head or abdomen followed by vomiting
- [Fever](#)
- Bloody, coffee grounds, bilious emesis



**Requires Immediate
Medical Attention**

Urgent

- Has not voided in 12 hours (8 hours in <1 years)
- Unable to tolerate fluids for 24 hours and fluids pushed for 6 hours with anti-emetics but ineffective
- Vomits for longer than 24 hours
- Projectile vomiting
- No tears when crying, dry mouth, poor skin turgor, sunken eyes
- Early morning vomiting on a daily basis
- Client has vomited NG tube and sole source of oral intake



**Requires Medical Attention
within the Next 4-6 Hours**

Non-Urgent

- Has acute vomiting that resolves and child is able to take fluids and continues to void
- Chemotherapy-related nausea that responds to antiemetic treatment
- No evidence of dehydration



**Support, Teaching, and Follow-
Up, As Required**



Client/Family Member Teaching

- Review antiemetic therapy, schedule, and dose
- Consult with team regarding changing or adding anti-emetic regime
- Review oral chemotherapy administration and any change in time given
- Encourage fluids frequently (based on size of child), small frequent meals, bland foods
- Teach signs and symptoms of dehydration such as increased thirst, loss of skin turgor, dry mouth, decreased urine output, decrease in number of wet diapers, weakness, lethargy, dizziness, decreased LOC, lack of tears
- Use of distraction tools for the client
- Give parameters for contacting again about the condition and response to treatment
- Monitor for other potential signs and symptoms of Graft versus Host Disease (e.g. rash [new or worsening], jaundice of the eyes or skin, worsening liver function tests, other GI symptoms including loss of appetite, abdominal pain, tenderness, cramping)

Follow-Up/Evaluation/Documentation

- Record date and time of telephone encounter
- Record assessment, interventions, and any follow-up plans
- Refer to LHIN Homecare Services or other appropriate colleagues as indicated (e.g. dietician)
- If non-urgent, reinforce with client to call back within 24 hours if symptoms do not improve or begin to deteriorate

- Reinforce with parent to seek immediate medical attention if any emergent symptoms appear
- Review with parent how to seek immediate medical attention

Potential Complications

- Dehydration and/or electrolyte imbalance
- Decreased nutrition
- Inability to take oral medicines as prescribed
- Potential for aspiration pneumonia, GI bleeding
- Esophageal tears

Risk Factors/Possible Causes

- Age: Younger smaller babies and children are more at risk
- Pre-existing impairment of major organ function
- Emetogenicity of chemotherapy protocol
- Anticipatory nausea and vomiting
- Disease status
- Recent surgery
- Opioid narcotics, severe pain
- Bowel obstruction, constipation, and ascites
- CNS disease, increased ICP
- Abdominal or CNS radiation
- Non-oncological: Flu, food poisoning, etc.
- Autologous vs. allogenic BMT (related vs. unrelated, degree of HLA match)
- GVHD
- Immune suppression
- Diet changes



References

- Anastasia, P. and Blevins, M. (1997). "Outpatient Chemotherapy: Telephone Triage for Symptom Management." *Oncology Nursing Forum*, 24, 13-22.
- Atkinson, K., Champlin, R., Ritz, J., Willem, F., Ljungman, P., and Brenner, M. (Eds.). (2003). *Clinical Bone Marrow and Blood Stem Cell Transplantation*. (3rd ed.). Cambridge, MA: Cambridge University Press.
- Barker, C.C., Anderson, R.A., Sauve, R.S., and Butzner, J.D. (2005). "GI Complications in Pediatric Patients Post-Bone Marrow Transplant." *Bone Marrow Transplant*, 36, 51-58.
- Barr, R.D., Crockett, M., Dawson, S., Eves, M., Whitton, A., and Wiernikowski, J. (2001) *Childhood Cancer: Information for the Client and Family*. (2nd ed.). Hamilton, ON: BC Decker.
- Baxter, A., Watcha, M., Baxter, W., Leong, T., Wyatt, M. (2011). "Development and Validation of a Pictorial Nausea Rating Scale for Children." *Pediatrics*, 127(6), 1542-1549. <http://doi.org/10.1542/peds.2010-1410>.
- Bender, C.M., McDaniel, R.W., Murphy-Ende, K., Rickett, M., Rittenberg, C.N., Rogers, M.P., et al. (2002). "Chemotherapy-Induced Nausea and Vomiting." *Clinical Journal of Oncology Nursing*, 6, 94-101.
- Bryant, R. (2003). "Managing Side Effects of Childhood Cancer Treatment." *Journal of Pediatric Nursing*, 18, 13-125.
- Clark-Snow, R., Affronti, M., Rittenberg, C. (2018). "Chemotherapy-Induced Nausea and Vomiting (CINV) and Adherence to Antiemetic Guidelines: Results of a Survey of Oncology Nurses." *Supportive Care in Cancer*, 26(2), 557-564. <http://doi.org/10.1007/s0052-017-3866-6>.
- Dupuis, L. L., Taddio, A., Kerr, E. N., Kelly, A., MacKeigan, L. (2006). "Development and Validation of the Pediatric Nausea Assessment Tool for Use in Children Receiving Antineoplastic Agents." *Pharmacotherapy: Journal of Human Pharmacology and Drug Therapy*, 26, 1221-1231. <http://doi.org/doi:10.1592/phco.26.9.1221>.
- Eckert, R.M. (2001). "Understanding Anticipatory Nausea." *Oncology Nursing Forum*, 28, 1553-1560.
- Ezzone, S. and Schmit-Pokorny, K. (2007). *Blood and Marrow Stem Cell Transplantation: Principles, Practice, and Nursing Insights*. (3rd ed.). Sudbury, MA: Jones and Bartlett Publishers.
- Flank, J., Robinson, P.D., Holdsworth, M., Phillips, R., Portwine, C., Gibson, P., Maan, C., Stefin, N., Sung, L., and Dupuis, L.L. (2016). "Guideline for the Treatment of Breakthrough and the Prevention of Refractory Chemotherapy-Induced Nausea and Vomiting in Children with Cancer." *Pediatric Blood and Cancer*, 63(7), 1144-1151.
- Gilmore, J., Peacock, N. W., Gu, A., Szabo, S., Rammage, M., Sharpe, J., Haislip, S. T., Perry, T., Boozan, T. L., Meador, K., Cao, X., Burke, T. A. (2013). "Antiemetic Guideline Consistency and Incidence of Chemotherapy-Induced Nausea and Vomiting in US Community Oncology Practice: INSPIRE Study." *Journal of Oncology Practice*, 10(1), 68-74. <http://doi.org/10.1200/JOP.2012.000816>
- Hedstrom, M., Haglund, K., Skolin, I., and von Essen, L. (2003). "Distressing Events for Children and Adolescents with Cancer: Child, Parent, and Nurse Perceptions." *Journal of Pediatric Oncology Nursing*, 20, 120-132.
- Kline, N.E. (Ed.). (2007). *Essentials of Pediatric Oncology Nursing: A Core Curriculum* (3rd ed.). Glenview, IL: Association of Pediatric Hematology/Oncology Nurses.
- Ladas, E.J., Post-White, J., Hawks, R., and Taromina, K. (2006). "Evidence for Symptom Management in the Child with Cancer." *Journal of Pediatric Hematology/ Oncology*, 28, 601-615.
- Marek, C. (2003). "Antiemetic Therapy in Patients Receiving Cancer Chemotherapy." *Oncology Nursing Forum*, 30, 259-271.
- Mehta, P. (2004). "Graft-Versus-Host Disease after Stem Cell Transplantation in Children." In Mehta, P. (Ed.), *Pediatric Stem Cell Transplantation* (pp. 401-411). Boston, MA: Jones and Bartlett Publishers.
- National Childhood Cancer Foundation and Children's Oncology Group (n.d.) from www.curesearch.org.



Nauright, L., Moneyham, L., and Williamson, J. (1999). "Telephone Triage and Consultation: An Emerging Role for Nurses." *Nursing Outlook*, 47, 219-226.

Oncology Nursing Society. (2018). Chemotherapy-induced nausea and vomiting. <https://www.ons.org/practice-resources/pep/chemotherapy-induced-nausea-and-vomiting>.

Patel, P., Robinson, P.D., Thackray, J., Flank, J., Holdsworth, M.T., Gibson, P., Orsey, A., Portwine, C., Freedman, J., Madden, J.R., Phillips, R., Sung, L., Dupuis, L.L. "Guideline for the Prevention of Acute Chemotherapy-Induced Nausea and Vomiting in Pediatric Cancer Patients: A Focused Update." *Pediatric Blood and Cancer*, 64(10).

Paw Cho Sing, E., Robinson, P.D., Flank, J., Holdsworth, M., Thackray, J., Freedman, J., Gibson, P., Orsey, A.D., Patel, P., Phillips, R., Portwine, C., Raybin, J.L., Cabral, S., Sung, L., Dupuis, L.L. "Classification of the Acute Emetogenicity of Chemotherapy in Pediatric Patients: A Clinical Practice Guideline." *Pediatric Blood and Cancer*, 66(5).

Pho, K. (Ed.). (2001). *Cancer Care Handbook*. (7th ed.). Kingston, ON: Kingston Regional Cancer Centre.

Polovich, M., White, J., and Kelleher, L. (Eds.). (2005). *Chemotherapy and Biotherapy Guidelines and Recommendations for Practice*. (2nd ed.). Pittsburg, PA: Oncology Nursing Society.

Rodgers, C., Wills-Alcoser, P., Monroe, R., McDonald, L., Trevino, M., and Hockenberry, M. (2008). "Growth Patterns and Gastrointestinal Symptoms in Pediatric Patients after Hematopoietic Stem Cell Transplantation." *Oncology Nursing Forum*, 35, 443-448.

Stewart, S.K. (2006). *Bone Marrow and Blood Stem Cell Transplants*. Highland Park, IL: Blood and Marrow Transplant Information Network.

Watcha, M., Lee, A., Medellin, E., Felberg, M., Bidani, S. (2019). "Clinical Use of the Pictorial Baxter Retching Faces Scale for the Measurement of Postoperative Nausea in Children." *Anesthesia & Analgesia*, 128(6), 1249-1255. <http://doi.org/10.1213/ANE.0000000000003850>.

Williams, P.D., Schmideskamp, J., Lavonne Ridder, E. and Williams, A.R. (2006). "Symptom Monitoring and Dependent Care During Cancer Treatment in Children: Pilot Study." *Cancer Nursing*, 29, 188-197.

Xu, C.F., Zhu, L.X., Xu, W.M., Chen, W.C., and Wu, D.P. (2008). "Endoscopic Diagnosis of Gastrointestinal Graft vs. Host Disease." *World Journal of Gastroenterology*, 14, 2262-2267.

Fever Assessment and Guidance

Definition

Fever: An oral temperature $\geq 38.3^{\circ}\text{C}$ or $\geq 38.0^{\circ}\text{C}$ for more than 1 hour or its axillary equivalent $\geq 37.8^{\circ}\text{C}$ or $\geq 37.5^{\circ}\text{C}$ for more than 1 hour.

Other Terms Used: “having a temperature,” “having chills,” “feeling cool/clammy,” “red/pink cheeks,” “feels hot,” “flushed,” “febrile”

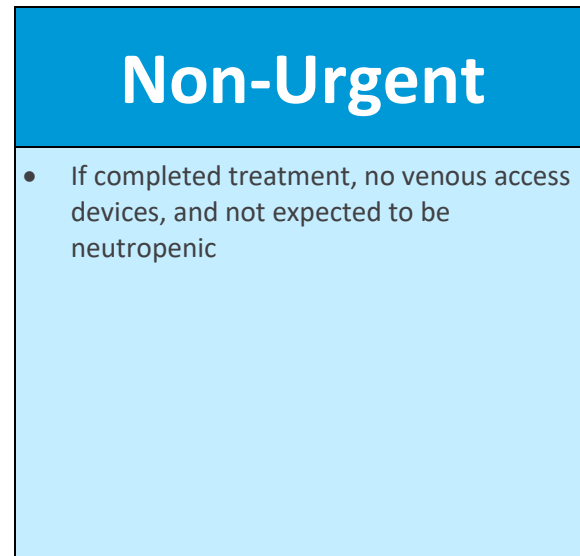
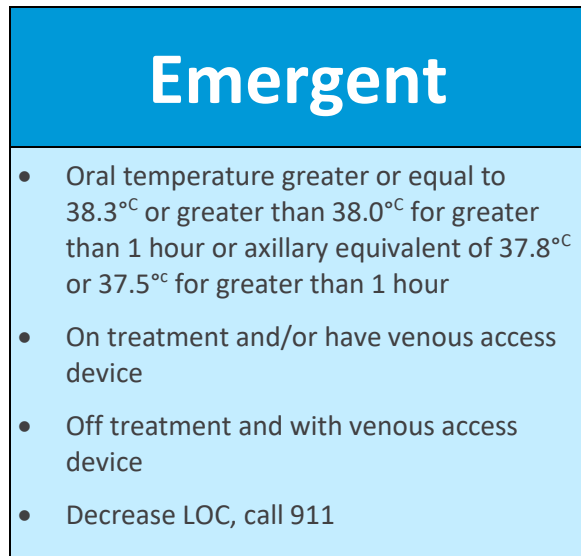
General Assessment

- Name, age, DOB, physician
- Name of caller/relationship
- Diagnosis, on or off treatment
- Type of treatment: Recent surgery, chemotherapy, radiation location, HSCT
- Last blood counts
- Current medications
- Allergies
- Pharmacy name, telephone number, and address
- Number for call back

Symptom Assessment – Guiding Questions

- How is your child acting right now?
- What is the child’s temperature? What is the onset, duration and pattern of the fever?
- Is the client experiencing chills, shaking, or muscle or bone aching?
- Has the fever been treated at all? Parents are instructed not to treat fever at home
- Does the child have other symptoms? Symptoms include:
 - Level of consciousness, headache or difficulty concentrating
 - Irritability
 - SOB
 - Change in client’s colour
 - Diaphoretic
 - Cough or sputum
 - Mouth sores
 - Nausea/vomiting
 - Eye drainage or irritation
 - Sore ears, sore throat, tooth aches
 - Open or draining wounds
 - Urinary burning or urgency
 - Painful BMs, diarrhea
 - New rash
 - Cuts/scrapes or bug bites.
- Does the child have any venous access device? If yes, what type (port, Hickman, PICC, or G-tube site) of access device? How does the site appear? Does the site have any redness, swelling, warmth?





Client/Family Member Teaching

- Instruct client/parents to seek medical attention as directed
- Ask client/parent to apply topical anesthetic to CVL site ahead of time, where appropriate
- Follow institutional policies in regards to the administration of over-the-counter analgesics of the same nature (i.e. acetaminophen and ibuprofen)
- Ensure that client/family understand expectation to go to emergency or clinic (depending on hospital policy) immediately and ask them how long it will take them to come in
- Are there any other factors that would inhibit them from coming promptly (other children, transportation, weather, etc.)?

Follow-Up/Evaluation/Documentation

- Record date and time of telephone encounter
- Record assessment, interventions, and any follow-up plans
- Refer to LHIN Homecare Services or other appropriate colleagues as indicated
- Request a phone follow-up within 24 hours for non-urgent patients and patients who were seen in emergency department but not admitted and if symptoms do not improve or begin to deteriorate
- Reinforce with parent to seek immediate medical attention if any emergent symptoms appear
- Review with parent how to seek immediate medical attention

Potential Complications

- If untreated, fever with or without neutropenia may quickly lead to life-threatening sepsis in immunocompromised clients
- Dehydration

Risk Factors/Possible Causes

- Chemotherapy
- Radiation therapy
- Graft versus Host Disease and associated immune suppression
- Disease process
- Immunosuppressant medications, including steroids
- Central venous access
- Known exposure to sick contacts
- Infection
- Mucositis
- Areas of skin breakdown
- History of heart disease or other chronic illness
- Recent surgery
- Neutropenia defined as absolute neutrophil count (ANC) of $<500 \mu\text{l}$ or $<1000 \mu\text{l}$ with predicted decline (Freifeld *et al.*, 2004)
 $\text{ANC} = (\text{WBC count}) \times (\text{neutrophil \%} + \text{bands \%})$



References

- Alexander, S.W., Wade, K.C., Hibberd, P.L., and Parsons, S.K. (2002). "Evaluation of Risk Prediction Criteria for Episodes of Febrile Neutropenia in Children with Cancer." *Journal of Pediatric Hematology/Oncology*, 24(1), 38-42.
- Barr, R.D., Crockett, M., Dawson, S., Eves, M., Whitton, A., and Wiernikowski, J. (2001). *Childhood Cancer: Information for the Client and Family*. (2nd ed.). Hamilton, ON: BC Decker.
- Donowitz, G.R., Maki, D.G., Crninch, C.J., Pappas, P.G., and Rolston, K. (2001). "Infections in the Neutropenic Patient: New Views of an Old Problem." *Hematology*, 113-139.
- Freifeld, A.G, Bow, E.J., Sepkowitz, K.A., Boeckh, M.J., Ito, J.I., Mullen, C.A., *et al.* (2011). "Clinical Practice Guidelines for the Use of Antimicrobial Agents in Neutropenic Patients with Cancer: 2010 Update by the Infectious Diseases Society of America." *Clinical Infectious Diseases*, 52(4), 56-93.
- Kline, N.E. (Ed.). (2007). *Essentials of Pediatric Oncology Nursing: A Core Curriculum* (3rd ed.). Glenview, IL: Association of Pediatric Hematology/Oncology Nurses.
- Lehrnbecher, T., Robinson, P., Fisher, B., Alexander, S., Ammann, R.A., Beauchemin, M., Carlesse, F., Groll, A.H., Haeusler, G.M., Santolaya, M., Steinbach, W. J., Castagnola, E., Davis, B.L., Dupuis, L.L., Gaur, A.H., Tissing, W.J.E., Zaoutis, T., Phillips, R. & Sung, L. (2017). "Guideline for the Management of Fever and Neutropenia in Children with Cancer and Hematopoietic Stem-Cell Transplantation Recipients: 2017 Update." *Journal of Clinical Oncology*, 35: 2082-2094.
- Polovich, M., White, J., and Kelleher, L. (Eds.). (2005). *Chemotherapy and Biotherapy Guidelines and Recommendations for Practice*. (2nd ed.). Pittsburgh, PA: Oncology Nursing Society.
- Provincial Pediatric Oncology Satellite Program Review Group. (2007). *Provincial Pediatric Oncology Satellite Program: A Blueprint for Service*. (Version 4). Toronto, ON: Pediatric Oncology Group of Ontario.
- Saltzer, W., Steinber, S.M., Liewehr, D.J., Freifels, A., Balis, F.M., and Widemann, B.C. (2003). "Evaluation and Treatment of Fever in the Non-Neutropenic

Child with Cancer." *Journal of Pediatric Hematology/Oncology*, 25(8), 606-612

Mucositis Assessment and Guidance

Definition

Mucositis: Inflammation of the oral cavity, including the mucous membranes of the mouth. It is characterized by mouth ulcers or sores and pain in the mouth, throat, and/or perianal area. (Tomlinson, Judd, Hendershot, Maloney and Sung, 2007)

Other Terms Used: “cankers,” “sores,” “white spots,” “sore gums,” “blisters”

General Assessment

- Name, age, DOB, physician
- Name of caller/relationship
- Diagnosis, on or off treatment
- Type of treatment: Recent surgery, chemotherapy, radiation location, HSCT
- Last blood counts
- Current medications
- Allergies
- Pharmacy name, telephone number, and address
- Number for call back

Symptom Assessment – Guiding Questions

- How is your child acting right now?
- Does your child have fever or any other associated symptoms, such as nausea, vomiting, diarrhea, rash, abdominal pain?
- Does the client have pain in his/her mouth or pain with swallowing?
- Does your child have breakdown in the rectal area? Is your child complaining of pain with stooling?
- Is your child having any bleeding (oral or rectal)?
- Is the child having difficulty breathing?
- Does the client have a dry or swollen tongue? Does the client have any lip lesions?
- Does the client has any saliva? Is the client drooling? Is the client able to suck?
- Are client’s mucous membraned reddened? Are there blisters, ulcers, or white patches? Is there a history of cold sores or mouth sores?
- Is the client able to drink or eat a regular diet? If so, what is the quantity? If not, have they switched to a soft bland diet and/or clear fluids?
- Is the client able to take oral medications as prescribed?
- Is the client using any mouthwashes? If yes, what kind and how often?
- Is the client taking any analgesics? What kind and how often?
- Does the client use any holistic or herbal treatments?



Emergent

- [Fever](#)
- Respiratory distress or difficulty breathing
- Decreased LOC



**Requires Immediate
Medical Attention**

Urgent

- Treatment change not effective within 6 hours
- Some pain on swallowing
- Saliva pooling or drooling
- Whitish covering of oral mucosa without ulcerations
- Unable to drink fluids or eat



**Requires Medical Attention
within the Next 4-6 Hours**

Non-Urgent

- Mild soreness or painless ulcers
- Pain controlled with medications
- Able to maintain oral intake



**Support, Teaching, and Follow-
Up, As Required**



Client/Family Member Teaching

- Perform mouth care 2 to 3 times daily and post-eating using medicated/pain mouthwash, as prescribed by physician. Alcohol-based mouthwashes should be avoided
- Encourage hourly small amounts of oral fluid intake to avoid dehydration and request parent to monitor oral intake
- Use extra soft toothbrush. The use of foam toothbrushes are never recommended
- If client can no longer brush with an extra soft toothbrush due to bleeding, sodium bicarbonate mouthwash can replace extra soft toothbrush and toothpaste.
 - Children should swish 5 to 15 mL of sodium bicarbonate in their mouth and then spit it out.
 - Children who are unable to spit out the mouthwash should swish 5 to 15 mL of water in their mouth and swallow it 2 to 3 times daily.
 - Children who cannot swish water in their mouth should have their caregiver wrap their finger in a clean damp cloth and use it gently to clean their child's teeth and mouth.
- Eat a soft diet and foods at room temperature. Avoid spicy, acidic, salty, or dry foods as well as foods with a hard texture or sharp foods
- Encourage intake of high-protein foods
- Monitor for signs of fever
- Use analgesia for pain as prescribed by physician
- Give analgesia prior to meal time

Follow-Up/Evaluation/Documentation

- Record date and time of telephone encounter
- Record assessment, interventions, and any follow-up plans
- Refer to LHIN Homecare Services or other appropriate colleagues as indicated (e.g. dietician)
- If non-urgent, reinforce with client to call back within 24 hours if symptoms do not improve or begin to deteriorate
- Reinforce with parent to seek immediate medical attention if any emergent symptoms appear
- Review with parent how to seek immediate medical attention

Potential Complications

- Systemic infection
- Malnutrition
- Airway obstruction
- Dehydration
- Constipation
- Electrolyte imbalance
- Pain
- Damage to oral structures and periodontal disease



Risk Factors/Possible Causes

- Multi-modal therapy
- Drugs that alter mucous membranes: Oxygen therapy, anticholinergics, antihistamines, phenytoin, and steroids
- Radiation therapy: Inflammatory response to treatment in head and neck region and total body irradiation
- Head and neck tumours: Disrupt the integrity of the oral mucosa, which may cause inflammation/infection
- Poor nutrition: Poor nutritional intake and diet high in refined sugars
- Dehydration
- Poor oral hygiene, soothers, bottles
- Chronic Graft versus Host Disease
- Past history or family history of cold sores/herpes zoster +/- recent discontinuation of antiviral therapy (e.g. Acyclovir)

References

- American Academy of Pediatric Dentistry. (2004). *Clinical Guideline on Dental Management of Pediatric Patients Receiving Chemotherapy, Hematopoietic Cell Transplantation, and Radiation*. Chicago, IL: American Academy of Pediatric Dentistry.
- Ariyawardana, A., Fong Cheng, K.K., Kandwal, A., Tilly, V., Al-Azri, A., Galiti, D., Chiang, K., Vaddi, A., Ranna, V., Nicolatou-Galitis, O., Lalla, R.V., Bossi, P., Elad, S. (MASCC/ISOO) (2019). "Systematic Review of Anti-Inflammatory Agents for the Management of Oral Mucositis in Cancer Patients and Clinical Practices Guidelines." *Supportive Care in Cancer*, 27:3985-3995.
- Beck, S. (1999). "Mucositis." In C. Yarbro, M. Frogge, and M. Goodman (Eds.), *Cancer Symptom Management* (2nd ed.) (pp. 328-343). Boston, MA: Jones and Bartlett.
- Bensadoun, R.J., Magné, N., Marcy P.Y., and Demard, F. (2001). "Chemotherapy and Radiotherapy-Induced Mucositis in Head and Neck Cancer Patients: New Trends in Pathophysiology, Prevention, and Treatment." *European Archives of Oto-Rhino-Laryngology*, 258, 481-487.
- Benson, L.M. and Cawley, M.M. (2005). "Current Trends in Managing Oral Mucositis." *Clinical Journal of Oncology Nursing*, 9, 584-592.
- Bowen, J., Al-Dasooqi, N., Bossi, P., Wardill, H., Van Seville, Y., Al-Azri, A., Bateman, E., Correa, M.E., Raber-Durlacher, J., Kandwal, A., Mayo, B., Nair, R.G., Stringer, A., ten Bohmer, K., Torpe, D., Lalla, R.V., Sonis, S., Cheng, K., Elad, S. (MASCC/ISOO) (2019). "The Pathogenesis of Mucositis: Updated Perspectives and Emerging Targets." *Supportive Care in Cancer*, 27:4023-4033.
- Daeffler, R. (1998). "Protective Mechanisms: Mucous Membranes." In B. Johnson and J. Gross (Eds.), *Handbook of Oncology Nursing*. (3rd ed.) (pp. 440-449). Boston, MA: Jones and Bartlett.
- Elad, S. "The MASCC/ISOO Mucositis Guidelines 2019 Update: Introduction to the First Set of Articles." *Supportive Care in Cancer*, 27:3929-3931.
- Hong, C.H.L., Gueiros, L.A., Fulton, J.S., Fong Chen, K.K., Kandwal, A., Galiti, D., Fall-Dickson, J.M., Johansen, J., Ameringer, S., Kataoka, T., Weikel, D., Eilers, J., Ranna, V., Vaddi, A., Lalla, R.V., Bossi, P., Elad, S. (MASCC/ISOO) (2019). "Systematic Review of Basic Oral Care for the Management of Oral Mucositis in Cancer Patients and Clinical Practice Guidelines." *Supportive Care in Cancer*, 27:3949-3967.
- Kemp, J. and Brackett, H. (2001). "Mucositis." In R. Gates and R. Fink (Eds.), *Oncology Nursing Secrets* (2nd ed.) (chap. 38). Philadelphia, PA: Hanley and Belfus, Inc.
- Kushner, J.A, Lawrence, H.P., Shoal, I., Kiss, T.L., Devins, G.M., Lee, L., et al. (2008). "Development and Validation of a Patient-Reported Oral Mucositis Symptom (PROMS) Scale." *Journal (Canadian Dental Association)*, 74(1), 59.
- Landers, R. and O'Hanlon-Curry, J. (2009). "Gastrointestinal Complications." In N.E. Kline (Ed.), *Essentials of Pediatric Hematology/Oncology Nursing: A Core Curriculum* (3rd ed., pp. 134). Glenview, IL: Association of Pediatric Hematology/Oncology Nurses.
- Miller, M. and Kearney, N. (2001) "Oral Care for Patients with Cancer. A Review of the Literature." *Cancer Nursing*, 24, 241-254.
- Nursing Professional Advisory Committee. (2004). *Telephone Nursing Practice and Symptom Management Guideline*. Toronto, ON: Cancer Care Ontario.
- Oral Care (Mouth Care) Guidelines & Advice.
<https://www.cancercareontario.ca/en/symptom-management/3156>.
Downloaded June 16, 2020.
- Polovich, M., White, J., and Kelleher, L. (Eds.). (2005). *Chemotherapy and Biotherapy Guidelines and Recommendations for Practice*. (2nd ed.). Pittsburg, PA: Oncology Nursing Society.
- Rubenstein, E.B., Peterson, D.E., Schubert, M., Keefe, D., McGuire, D. Epstein, J. et al. (2004). "Clinical Practice Guidelines for the Prevention and Treatment of Cancer Therapy-Induced Oral and Gastrointestinal Mucositis." *Cancer Supplement*, 100, 2026-2046.
- Sung, L., Robinson, P., Treister, N., Baggott, T., Gibson, P., Tissing, W., Wiernikowski, J., Brinklow, J., Dupuis, L.L. (2017). "Guideline for the Prevention of Oral and Oropharyngeal Mucositis in Children Receiving Treatment for Cancer."



or Undergoing Haematopoietic Stem Cell Transplantation.” *BMJ Supportive & Palliative Care*, 7:7-16.

Tomlinson, D., Gibson, F., Treister, N., Baggott, C., Judd, P., Hendershot, E., ...Sung, L. (2009). “Designing an Oral Mucositis Assessment Instrument for Use in Children: Generating Items Using a Nominal Group Technique.” *Supportive Care in Cancer: Official Journal of the Multinational Association of Supportive Care in Cancer*, 17(5), 555-562.

Tomlinson, D., Judd, P., Hendershot, E., Maloney, A. M., and Sung, L. (2007). “Measurement of Oral Mucositis in Children: A Review of the Literature.” *Supportive Care in Cancer: Official Journal of the Multinational Association of Supportive Care in Cancer*, 15(11), 1251-1258.

Tomlinson, D., Judd, P., Hendershot, E., Maloney, A. M., and Sung, L. (2008). “Establishing Literature-Based Items for an Oral Mucositis Assessment Tool in Children.” *Journal of Pediatric Oncology Nursing*, 25(3), 139-147.

Wojtaszek, C. (2000). “Management of Chemotherapy-Induced Stomatitis.” *Clinical Journal of Oncology Nursing*, 4, 263-270.

Acute Pain Assessment and Guidance

Definition

Pain: A subjective experience. Pain is what the client says it is. The International Association for the Study of Pain defines pain as “an unpleasant sensory and emotional experience associated with actual or potential tissue damage or described in terms of such damage.”

Other Terms Used: “aches,” “discomfort,” “soreness,” “owie,” “hurt”

General Assessment

- Name, age, DOB, physician
- Name of caller/relationship
- Diagnosis, on or off treatment
- Type of treatment: Recent surgery, chemotherapy, radiation location, HSCT
- Last blood counts
- Current medications
- Allergies
- Pharmacy name, telephone number, and address
- Number for call back



Symptom Assessment – Guiding Questions

- How is your child acting right now?
- **Location:** Note whether external or internal, stationary or radiating. Is it a new site of pain? Does the location change?
- **Intensity:** (0-10) Include present rating of pain, rating of pain at its worst, rating of pain at its least, rating of acceptable pain
- If client is not able to verbalize, have client/caregiver describe client's facial expression, quality of cry, motor activity, consolability, guarding of part of body that hurts, skin colour, and respiration
- **Description:** Use client's words (e.g. dull ache, stabbing, sharp, unbearable, cramping, burning, exhausting, pins and needles, throbbing)
- **Associated Symptoms:** Nausea, vomiting, constipation, anxiety, dyspnea, numbness, tingling, urinary retention, anorexia, motor weakness, effects on ability to carry on with daily life, sleep disturbances, irritability, fever
- **Duration:** How long does pain usually last (e.g. seconds, minutes, hours, constant)?
- **Aggravating/alleviating factors:** Walking, moving, eating, time of day (when?), heat, cold, distraction, massage, lying still, relaxation, changing position, medication, other
- What pain medications are being used? What route of administration is being used? How long has the client been on these specific pain medications?
- How often have pain medications been given?
- What was the last medication received and what time?
- Does the child get relief from pain medications? For how long?
- What are the client's expectations regarding pain control (total absence of pain, expected timeframe to control pain)?
- What is the client's past history with pain including response, coping mechanisms, medications used?
- What is the comfort level/coping skills of parent/caregiver who is managing child with pain?
- What has been prescribed for managing any medication side effects?
- Is there a past history of injury or recent injury?
- Has there been a recent change in activity level?
- Does the child have any past history of chicken pox (possibility of acute pain related to shingles without rash)

Emergent

- Client is in acute distress/discomfort
- Onset is sudden and acute
- Associated symptoms: [Fever](#), motor weakness, decreased LOC
- Analgesics are ineffective
- Vomiting and unable to take medications



**Requires Immediate
Medical Attention**

Urgent

- Moderate pain
- Pain associated with injury
- Pain or analgesics interfering with ADL
- Client states he/she cannot manage pain with present treatment regime



**Requires Medical Attention
within the Next 4-6 Hours**

Non-Urgent

- Client not using analgesics appropriately
- Mild pain not interfering with ADL
- Requires prescription and/or referral



**Support, Teaching, and Follow-
Up, As Required**



Client/Family Member Teaching

- Take prescribed analgesics regularly, as directed. Avoid use of acetaminophen and NSAIDs, unless instructed by physician. Use breakthrough doses as needed. Use a diary to track pain and to keep a record of the effectiveness
- For non-urgent case, recommend pain reassessment one hour post-intervention and follow up as necessary
- Review potential side effects of administered pain medications and request caregiver to monitor and record any side effects (e.g. bowel routine). For management of pain due to mucositis, refer to [mucositis guidance](#)
- If waking up at night, plan to take breakthrough dose before going to bed
- Anticipate possible painful events (e.g. bathing, dressing changes, movement) and pre-medicate with analgesic beforehand
- Review non-pharmacologic measures to be used in concert with analgesics:
 - Imagery/distraction techniques can be used while waiting for analgesic to take effect
 - Reposition
 - Massage promotes muscle relaxation
 - Heat or cold may diminish pain sensation
 - Social activities may distract from pain
 - TV, music, and relaxation exercises facilitate concentration and attention on sensations other than pain
 - Activity, as tolerated

Follow-Up/Evaluation/Documentation

- Record date and time of telephone encounter
- Record assessment, interventions, and any follow-up plans
- Refer to LHIN Homecare Services or other appropriate colleagues as indicated (e.g. dietician)
- If non-urgent, reinforce with client to call back within 24 hours if symptoms do not improve or begin to deteriorate
- Reinforce with parent to seek immediate medical attention if any emergent symptoms appear
- Review with parent how to seek immediate medical attention

Potential Complications

- Disruption of ADL
- Psychosocial distress (e.g. depression)
- Sleep disruption
- Inadequate pain management leads to increased pain-related distress, which can increase interference with daily life activities
- Overdose due to inadequate daily assessment of pain
- Side effects of pain medications (e.g. opioids and constipation)

Risk Factors/Possible Causes

- Oncologic emergency: Spinal Cord Compression, Superior Vena Cava Syndrome
- Risk factor for inadequate pain management: Knowledge deficit
- Tumour involvement
- Tumour metastasis
- Secondary complication of therapy (adhesions, phantom limb pain, nerve compression)
- Pain related to other health problems (headache, constipation)
- Mucositis
- Diagnostic or treatment procedure
- Radiation therapy
- Chemotherapy
- Steroid use (potential for fractures, avascular necrosis)
- Past surgeries
- Not cancer-related
- Past history of chicken pox (therefore risk of shingles)



References

- Ameringer, S., Macpherson, C.F., Jibb, L. (2020) "Symptom Science in Pediatric Oncology." In: Hinds, P., Linder, L. (eds) *Pediatric Oncology Nursing*. Pediatric Oncology. Springer, Cham.
- Baggot, C. R., Kelly, K.P., Fochtman, D., and Foley, G.V. (2002). *Nursing Care of Children and Adolescents with Cancer*. (3rd ed.). Philadelphia, PA: W.B. Saunders, Co.
- Ellis, J., and Rowly, B. (2003). "Keeping Pediatric Patients Comfortable." *Nursing*, 33, 22.
- Graham, M.V. and Uphold, C.R. (2004). "Pain." In *Clinical Guidelines in Child Health* (3rd ed., pp. 70-78). Gainesville, FL: Barmarrae Books, Inc.
- International Association for the Study of Pain. (n.d.) from <https://www.iasp-pain.org/terminology?navItemNumber=576#Pain>.
- Jibb, L., Nathan, P., Stevens, B., Seto, E., Cafazzo, J., Stephens, N., *et al.* (2015). "Psychological and Physical Interventions for the Management of Cancer-Related Pain in Pediatric and Young Adult Patients: An Integrative Review." *Oncology Nursing Forum*, 42(6), E339–E357. <http://doi.org/10.1188/15.ONF.E339-E357>.
- Loeffen, E. A. H., Mulder, R. L., Font-Gonzalez, A., Leroy, P. L. J. M., Dick, B. D., Taddio, A., *et al.* (2020). "Reducing Pain and Distress Related to Needle Procedures in Children with Cancer: A Clinical Practice Guideline." *European Journal of Cancer*, 131, 53–67. <http://doi.org/10.1016/j.ejca.2020.02.039>.
- Merkel, S., Vopel-Lewis, T., and Malviya, S. (2002). "Pain Assessment in Infants and Young Children: The FLACC Scale." *American Journal of Nursing*, 102, 55-58.
- Registered Nurses Association of Ontario. (2002). *Nursing Best Practice Guideline: Assessment and Management of Pain*. Toronto, ON: Registered Nurses Association of Ontario.
- Remke, S. and Ramer Chrostel, J. (2007). Improving Care in the Home for Children with Palliative Care Needs. *Home Healthcare Nurse*, 25, 45-51.
- Rief, S. (2010). "Relaxation, Guided Imagery, and Visualization Techniques." *Family Education*. Retrieved from <https://www.familyeducation.com/school/coping-adhd/relaxation-guided-imagery-visualization-techniques>.
- Stinson, J.N., Jibb, LA. (2013). Pain Assessment. In: A. Twycross, S. Dowden, J.N. Stinson (Eds.), *Managing Pain in Children: A Clinical Guide for Nurses and Healthcare Professionals*, 2nd ed. (112-139). Oxford: Wiley-Blackwell.
- Tan, S.J. (2002). "Recognition and Treatment of Oncologic Emergencies." *Journal of Infusion Nursing: The Official Publication of the Infusion Nurses Society*, 25(3), 182-188.
- Turk, D.C., Monarch, E.S., and Williams, A.D. (2002). "Cancer Patients in Pain: Considerations for Assessing the Whole Person." *Hematology/Oncology Clinics of North America*, 16(3), 511-525.
- van de Wetering, M.D., Schouten-van Meeteren, N.Y.N. "Supportive Care for Children with Cancer." *Semin Oncol* [Internet] 2011 Jun; 38(3):374e9. Cited 2017 May 15, <http://www.ncbi.nlm.nih.gov/pubmed/21600366>.
- Wiffen, P.J., Cooper, T.E., Anderson, A.K., *et al.* "Opioids for Cancer-Related Pain in Children and Adolescents". *Cochrane Database Syst Rev*. 2017;7(7):CD012564. Published 2017 Jul 19. [doi:10.1002/14651858.CD012564.pub2](https://doi.org/10.1002/14651858.CD012564.pub2).





Appendix A

Telepractice Communication Principles and Techniques

Wheeler, S.Q. and Siebelt, B. (1997); Wheeler, S.Q. and Windt, J. (1993)

The nurse's ability to provide care is supported by communication skills, both verbal and listening. With effective communication, the nurse can be more confident in the ability to obtain a complete history and assessment, thereby assisting the client to receive the most appropriate care.

Telephone Personality

- The first 10 to 20 seconds of a telephone interaction significantly impact the client's perception of the nurse's ability and desire to meet the client's needs. The simple technique of pausing and focusing before each encounter will help maintain the freshness of the nurse's voice.
- The client's perception of the nurse's attitude often serves to define the potential for a trusting, positive relationship. A caring attitude is the focus of positive communication and cannot be stressed enough.

*If clients don't know how much you care,
they won't care how much you know...*

Ways to portray a caring attitude may include the following:

- Avoid assumptions or stereotypes
- Empathize with the client
- Use reflective speech or verbal responses that project interest and active listening

- Address the client by name throughout the encounter. Initially, and until given permission, use more formal titles such as "Mr."
- Do not use terms of endearment, such as "honey," as these are demeaning.
- Treat each call as if it were the first call of the day. Consistency, combined with control, empathy and clear focus, are needed when dealing with challenging calls.
- Self-confidence and organization will impact the nurse's communication efforts. Having basic supplies, such as pens, paper, and access to the client's medical record, will allow the nurse to focus on the caller instead of scrambling for the required equipment.

Voice Quality

Tone

Use a tone of voice that has vitality, is pleasant, and is natural. Smile when you speak, as this will naturally raise the pitch of your voice. How the nurse is feeling is reflected in facial expression and then translated through the tone of voice. In turn, the client's emotions are reflected in their tone of voice and should be part of the nurse's assessment.

Volume

Nurses need to remain aware of the volume of their voice. Variations in volume can add emphasis and impact to phone encounters. Remaining calm and consistent may diffuse a tense situation. A nurse may have a naturally quiet voice volume and need reminders to speak up. If a client cannot hear the nurse, valuable information may be lost in the phone encounter and the client may be uncomfortable in asking the nurse to repeat him/herself.

Clarity and speed

Careful enunciation and a moderate pace are positive communication techniques. Variation in the rate of speed can reflect mood changes and emphasize points. The nurse must listen to the client for direction, based on the client's ability to respond to questions. A client who has a hearing impediment or speech/language barrier will require slower-paced communication. Clarity can be achieved by avoiding medical or technical terms.

Barriers to Effective Communication

- Sounding busy or abrupt
- Using inappropriate language or slang
- Arguing with the client
- Placing blame on the client or other health care providers
- Lecturing the client
- Minimizing the client's concerns
- Rushing the call



- Losing professional perspectives
- Chewing while speaking
- Speaking too loudly or too softly
- Carrying on more than one conversation at a time
- Conducting the call in a noisy, non-private area
- Being unprepared to respond to the client's need
- Knowledge gaps
- Bias
- No personalization of the situation

Listening Skills

Listening is more than just hearing. Listening involves paying attention and understanding that there is meaning beyond the words the client uses.

Concentrate

It is very easy to be distracted both mentally and physically. Make a conscious effort to listen carefully.

Review

Repeat/review what the client has said to make sure it is understood.

Don't jump to conclusions

A barrier may be erected if the nurse prematurely anticipates the client's needs.

Listen for auditory cues

The noises or sounds that accompany speech provide vital cues of emotion that can convey information. Should the nonverbal cues not match what is being said, then the nurse should suspect that something is wrong.

Interview Strategies

The nurse needs to be a skilled interviewer to perform successful client assessment.

Identify the caller

Inquire who the caller is and their relationship to the patient. The nurse may use several validations such as child's full name, date of birth, and diagnosis to protect confidentiality. The telephone triage nurse should be familiar with privacy regulations in his/her region or organization.

Open-ended questions

Eliminate "Yes/No" responses in order to elicit greater amounts of information.



Summarizing statements

Will help establish a basis for further conversation. Example: “These seem to be your concerns ...”

Reflective statements

Convey the nurse's observations and attention to more than just the verbal exchange. Example: “You seem to be out of breath ...” or “You seem very upset.”

Encouraging statements

Phrases that encourage the client to continue to share information. Example: “Please go on ...” or “Please tell me more about ...” The nurse may need to be more focused with a client who tends to wander off topic.

Ask clarifying questions

The nurse needs to obtain further detailed information about a certain subject or a clearer understanding of a client's response. Example: “You vomited how many times?”

Restating

Can demonstrate the nurse's understanding of what the client is saying. Example: “So, you would say that you feel better today?” The nurse may ask the client to repeat what they understood was said by the nurse.

Validation statements

The nurse acknowledges the abilities and actions of the client. Example: “You did the right thing by calling.”

Constructive statements

The nurse will motivate cooperation by using constructive statements that appeal to the client's sense of autonomy. Utilizing tact and “I” statements will be more graciously accepted by the client. Try “I need you to ...” or “It would be helpful if you ...” instead of “You have to ...” or “You should ...”

Definitive statements

The client and nurse both need to be clear about what is being said. Try “I will ...” instead of “I’ll try to ...” or, when arranging a follow-up call, be specific about times. Example: “I will call back in two hours” instead of “I will call back as soon as possible.”

Positive focus

The nurse has options, even in situations where she/he may not have the answers. The focus should be on what can be done instead of on what barriers may exist. Therefore, a statement such as “I don’t know, but I can find out” is better than “I don’t know.” If a client has unreasonable demands, try “This is what I can do” instead of “That is impossible.”

Direct communication

If possible and appropriate, talk directly to the client using age-appropriate communication.



Call Closure

- The nurse should use the skill of summarization to review progress and pull important facts together.
- The nurse should review whether the client has the resources/ability to carry out any instructions given.
- The nurse should review instruction so that the client clearly understands their responsibilities. Use of “I will/you will” statements cement the instruction. “You will take/give the prescribed anti-nausea medication as soon as you get it, and again four hours after that. If it is ineffective, you will call me back. I will fax the prescription to your pharmacy for you to pick it up.”
- The nurse should tell the client to call back if symptoms persist, worsen, or change. Confirm compliance with agreed-upon actions.
- Last impressions of a call have a great impact on the client and the nurse needs to continue to pay close attention to the tone of voice and rate of speech of the client. Allow time for any last-minute questions and allow the client to disconnect the call first.

Common Pitfalls in Telephone Communication

The following are situations to avoid in telephone communication and are common errors made by telephone triage nurses (Wheeler, S.Q. and Windt, J. 1993; Wheeler, S.Q., 2011).

Leading questions

Avoid leading the caller towards a specific answer or diagnosis. Allow time for the caller to express their concerns in their own way using open-ended questions.

Wheeler and Windt (1993) state: “Rather than seeking to determine a specific cause of symptoms, the telephone triage nurse aims to identify symptoms and classify them by acuity” (p. 34).

Medical jargon

Communicate using words that the client will understand.

Collecting inadequate data

Collect enough information to provide a clear picture of what the problem is.

Not talking long enough

Provide enough time to get the information you need (5 to 10 minutes).

Jumping to conclusions

Never assume that you know the reason for the caller’s concern.



Stereotyping callers

Never prejudge or assume information about a person. Remain open to new or discrepant information.

Accepting self-diagnosis

The caller may be incorrect in what they feel is causing the problem(s). Delve further if there is ambiguous or conflicting information given.

Second-guessing the caller

Ask questions in different ways. Allow the caller to complete their whole train of thought. Wheeler and Windt (1993) describe this as “You’re not sick until I say you are syndrome” (p. 77).

Language barrier

If English is not the child or family’s first language, the nurse must arrange for interpretive or translation services when communicating on the telephone. The nurse should not try to assume what the caller is saying in a suboptimal communication situation.

Beware of Red Flags

Wheeler, S.Q. (2000)

Red Flags are broad categories of high risk. Consider the acronym “SAVED” when assessing for Red Flags:

S	Severe symptoms E.g. pain, bleeding, shock, cardiac arrest
A	Age of caller and age-related considerations
V	Veracity: The caller is able to produce the events of the situation accurately E.g. ask the same question in different ways
E	Emotional distress or stress of the caller
D	Debilitation/distance E.g. Is he/she bedridden/mobile? Does the client/family member have access/transportation to the centre?

Communication Challenges

Challenging Callers

The nurse must remember that the goal is to assist the client to find a means to regain or maintain health and well-being. The client, due to stress or personal circumstances, may not be able to effectively communicate with the nurse. The nurse must deal with the client's actual feelings and then the problem itself.

- Avoid prematurely reacting to the client’s emotions

- Empathize with the client. Do not judge
- Listen to understand, though not necessarily agree with, the client
- Remain calm and non-confrontational
- Allow the client to vent
- Use reflective statements to clarify the client’s feelings
- Attempt to help the client by asking questions such as “What can I do for you?”
- Know when and how to terminate a call
- Do not become complacent with frequent/familiar callers, as something important may be missed

Emergency Situations

An emergency can strain the client's ability to communicate clearly.

- Reassure and engage the client. Statements such as “I’m listening, please continue” help calm the client.
- Provide calm and specific advice. By providing specific actions, the nurse assists the client in gaining control of the situation

Refusal to Follow Advice

- If the client refuses to follow the advice given, the nurse should clearly state and document the consequence of that action. Example: “Do you understand what could occur if you do not follow this advice?”
- If the client refuses to follow the advice, the nurse should find out what they intend to do. The response should be documented.

Frequent or Constant Callers

- In cases when patients and families use the telephone for constant interaction, the nurse must treat each call as important and assess the specific reason for each call.
- In addition, the nurse needs to assess possible reasons for repeated calls and identify support services that may be needed by the caller and family. For children who have recently been discharged from the hospital after a new diagnosis or with a change in medical condition, additional child and family education may be required.
- If the child and family are experiencing stress and anxiety, referrals to social services or psychology may be warranted.

Obscene Calls

Obscene/threatening calls are upsetting.



- Consider whether the use of foul language is “normal” for this client
- Focus on getting to the root of the problem and attempting to calm the client
- Do not match the client’s frustration level and/or obscene language
- If abusive or obscene language continues, the nurse needs to be prepared to follow the organization’s policies. This may include informing the client that the call will be terminated if the language continues
- Thorough documentation is necessary

References

- American Academy of Ambulatory Care Nursing. (2003). *Telehealth Nursing Practice Core Course Manual*. (2nd ed.). Pitman, NJ: American Academy of Ambulatory Care Nursing.
- American Academy of Ambulatory Care Nursing. (2007). *Telehealth Nursing Practice Administration and Practice Standards*. (4th ed.). Pitman, NJ: Jannetti Publications, Inc.
- Anastasia, P. (2002). “Telephone Triage and Chemotherapy Symptom Management in the Ambulatory Care Setting.” *Oncology Supportive Care Quarterly*, 1, 40-55.
- Anastasia, P. and Blevins, M. (1997). “Outpatient Chemotherapy: Telephone Triage for Symptom Management.” *Oncology Nursing Forum*, 24, 13-22.
- Cady, R. (1999). Telephone Triage - Avoiding the Pitfalls. *The American Journal of Maternal/Child Nursing*, 24, 209.
- Canadian Nurses Protective Society. (1993). “Confidentiality of Health Information: Your Client’s Right.” *infoLAW: A Legal Information Sheet for Nurses*, 1, 1-2. (Reprinted 1996).
- Canadian Nurses Protective Society. (1997). *Telephone Advice*. infoLAW: A Legal Information Sheet for Nurses. 6, 1-2. (Reprinted 2002).
- Canadian Nurses Protective Society. (2008). *Telephone Advice infoLAW*. Retrieved March 26, 2019 from https://www.cnps.ca/upload-files/pdf_english/teladvice.pdf.
- Canadian Nurses Protective Society. (2004). “Negligence.” *infoLAW: A Legal Information Sheet for Nurses*, 3, 1-2. (Revision of 1994).
- Canadian Association of Nurses in Oncology. (2017). *Standards of Care, Roles in Oncology Nursing, Role Competencies*. Retrieved March 26, 2019 from https://cdn.ymaws.com/www.cano-acio.ca/resource/resmgr/standards/Standards_of_Care_ENG.pdf.
- Cancer Care Ontario. (2004). *Telephone Nursing Practice and Symptom Management Guideline*. Toronto, ON: Cancer Care Ontario.
- Chobanuk, J., Pituskin, E., Kashuba, L., and Bates, J. (1999). “Telephone Triage in Acute Oncology.” *The Canadian Nurse*, 95, 30-32.

- Coleman, A. (1997). "Where Do I Stand? Legal Implications of Telephone Triage." *Journal of Clinical Nursing*, 6, 227-231.
- College of Nurses of Ontario. (2005) *Practice Guideline: Telepractice*. Toronto, ON: College of Nurses of Ontario.
- College of Nurses of Ontario. (2017). *Practice Guideline: Telepractice* (Pub. No. 41041). Retrieved March 26, 2019 from https://www.cno.org/globalassets/docs/prac/41041_telephone.pdf.
- College of Nurses of Ontario. (2017). *Practice Standard: Confidentiality and Privacy – Personal Health Information* (Pub. No. 41069). Retrieved March 26, 2019 from https://www.cno.org/globalassets/docs/prac/41069_privacy.pdf.
- College of Nurses of Ontario. (2007). *Fact Sheet: What is Nursing?* Toronto, ON: College of Nurses of Ontario.
- College of Nurses of Ontario. (2008). *Practice Standard: Documentation*, Revised 2008. Toronto, ON: College of Nurses of Ontario.
- College of Nurses of Ontario. (2018). *Practice Standard: Professional Standards*, Revised 2002 (Pub. No. 41006). Retrieved March 26, 2019 from http://www.cno.org/globalassets/docs/prac/41006_profstds.pdf.
- College of Nurses of Ontario. (2018). *Practice Standard: Therapeutic Nurse-Client Relationship*, Revised 2006 (Pub. No. 41033). Retrieved March 26, 2019 from http://www.cno.org/globalassets/docs/prac/41033_therapeutic.pdf.
- Dundas, J. and Casler, C. (1998). "Can I Talk to a Nurse?" *Nursing Management*, 29, 37-40.
- Gulanick, M., Green, M., Crutchfield, C., Myers, C., and Marren, M. (1996). "Telephone Nursing in a General Medicine Ambulatory Clinic." *MEDSURG Nursing*, 5, 93-98.
- Healthcare Insurance Reciprocal of Canada. (2000). *Legal Considerations in the Provision of Telephone Advice*. HIROC Claims and Risk Management Bulletin, 17, May.
- Hickey, M. and Newton, S. (2012). *Telephone Triage for Oncology Nurses* (2nd ed., p.240). Pittsburgh: Oncology Nursing Society.
- Kline, N.E. (Ed.). (2007). *Essentials of Pediatric Oncology Nursing: A Core Curriculum* (3rd ed.). Glenview, IL: Association of Pediatric Hematology/Oncology Nurses.
- Larson-Dahn, M.L. (2001). "Tel-eNurse Practice: Quality of Care and Patient Outcomes." *Journal of Nursing Administration*, 31, 145-152.
- Lopez, A. and Marin, M. (2008). *Strategies for the Control and Investigation of Varicella Outbreaks Manual*. Retrieved May 5, 2010 from cdc.gov. The Official Web Site of the Centers for Disease Control and Prevention: <https://www.cdc.gov/chickenpox/outbreaks/manual.html>.
- Mikels, C. (1999). Legal issues of telephone nursing lecture presented at Rockford health system. *Telehealth Nursing Practice Core Course Manual*. Rockford, IL.
- Nail, L., Greene, D., Jones, L.S. and Flannery, M. (1989). "Nursing Care by Telephone: Describing Practice in an Ambulatory Oncology Center." *Oncology Nursing Forum*, 16, 387-395.
- Simonsen-Anderson, S. (2002). "Safe and Sound." *Nursing Management*, 33, 41-43.

Tapp, A. (2000). *Legal Issues in the Practice of Telephone Advice*. Plenary Session, October 13.

Wheeler, S.Q. and Windt, J. (1993). *Telephone Triage, Theory, Practice and Protocol Development*. Albany, NY: Delmar Publishers, Inc.

Wheeler, S.Q. and Siebelt, B. (1997). "Calling All Nurses: How to Perform Telephone Triage." *Nursing*, 27, 37-41.

Wheeler, S. (2000). "Telephone Triage: Saved by the Form." *Nursing*, 20, 54-55.



Appendix B

Case Scenario #1: Neuroblastoma

Jayden is a 6-year-old boy with an abdominal mass and was diagnosed at a tertiary centre with Stage 4 Neuroblastoma on September 20, 2019. He had a double lumen CVL inserted on September 22, 2019. On September 26, 2019, Jayden started Day 0, High-Risk Neuroblastoma, A3973, induction, Cycle #1. Jayden received Vincristine and Cyclophosphamide with Mesna (Day 0 to Day 2). On Day 3, Jayden started on G-CSF s/c daily to continue until his ANC > 1.5.

Jayden is having bi-weekly CBC and differential checked at the POGO Satellite Clinic located close to his home. On Day 9, Jayden's CBC and differential revealed the following results: hg- 82, WBC- 2.1, plt- 50 and ANC- 1.1.

Today, you receive a call from Jayden's mother (Day 11) who has some concerns regarding his condition. His mother is anxious, as Jayden's diagnosis is still very new to the family. She has called because her son's temperature is 38.6°C PO for the past hour. She has an information binder at home and has been reviewing the information on fever and neutropenia.

As you start to question his mother, you also realize that Jayden is refusing to eat today and is drinking poorly. Jayden will not allow his mother to look into his mouth but she has been doing oral mouth care with him four times daily and using the prescribed mouthwash.

Questions

1. After listening carefully to the conversation, what findings have triggered your concern most?
 - a) Jayden received chemotherapy 11 days ago and has a fever.
 - b) Jayden is newly diagnosed.
 - c) The results of Jayden's blood work two days ago were declining.
 - d) Jayden is not eating and is drinking poorly.
 - e) Jayden has a double lumen, which was inserted two weeks ago.
 - f) Mom is giving mouth care.
2. Considering Jayden's blood work results two days ago, the risk of neutropenia, and the possible need for blood products, what questions would you ask?
 - a) Does Jayden have any bruising?
 - b) Is Jayden sleeping more?
 - c) Does Jayden feel dizzy or look pale?
 - d) Has Jayden been receiving his G-CSF daily?
 - e) Is Jayden experiencing chills/cold?
 - f) All of the above.
3. Based on the information you have received through discussion with the parent, which of the following is the most important to consider first?
 - a) Jayden is eating poorly and, from the information received, you conclude that Jayden likely has mouth sores.
 - b) From results of Jayden's blood work two days ago, you are concerned that Jayden is neutropenic and may require blood products.
 - c) Jayden presently has a fever.
 - d) Jayden needs to go to the POGO Satellite Clinic immediately for assessment and work up for fever and neutropenia.
4. What are the legal implications specific to this phone call and what actions would you take to lower any nursing practice risk related to assessing a client over the phone?
 - a) Do not overreact or underreact.
 - b) Speak in non-medical language that the parent can understand.
 - c) Assess the collected data thoroughly so that you can analyze the situation critically.
 - d) Use hospital guidelines/protocols to assist in decision-making.
 - e) Have parent repeat instructions back to you and clarify unclear information.
 - f) All of the above.



5. What would you include in your documentation up to this point?
 - a) Date and time of call.
 - b) Name, telephone number, and medical record number.
 - c) Information received, advice or information given.
 - d) Referral and follow-up information.
 - e) Parent's verbal response and understanding of information.
 - f) Name and designation of person taking the call.
 - g) All of the above.

6. What questions would you ask yourself during the interview? Questions should assist the nurse in self-evaluation and protocol evaluation.
 - a) Was I able to gather adequate information from the questions that I asked?
 - b) When screening this call, was it considered emergent and was this the appropriate level of urgency at this time?
 - c) Did the plan that I implemented produce the most appropriate results?
 - d) Was the documentation complete?
 - e) What could I have done better?
 - f) Did the parent seem satisfied?
 - g) All of the above.

You have asked Jayden's mother to bring him immediately to the POGO Satellite Clinic to be assessed. You have completed your telephone advice documentation form, ordered Jayden's old chart, and notified the pediatrician/oncologist of Jayden's pending arrival to the clinic. You have received orders to obtain the blood work required on the fever/neutropenia protocol. After the blood work is drawn, you are to page the physician to assess Jayden.

Reflective Practice: Review Questions

The following are a list of review questions that will assist self-evaluation and protocol evaluations (please review and reflect on these):

- Did the assessment gather adequate information from the client?
- Was this client screened for other associated symptoms that would be considered emergent?
- Was the most appropriate symptom assessment and guidance algorithm used to support the nursing process?
- Was the level of urgency or directive for care the most appropriate level?
- Were all the appropriate and available resources considered in developing the plan?
- Did the implemented plan provide the desired result?



- Was documentation complete, concise and accurate?
- Was communication made to other parties as appropriate to enhance quality of care?
- What could the nurse have done better? How could the nurse improve her/his practice? Is there anything different that the nurse could do next time to improve practice?
- What was the client's level of satisfaction with the care provided?

Case Scenario #1: Answers

1. Answer: **a)**
2. Answer: **f)**
3. Answer: **d)**
4. Answer: **f)**
5. Answer: **g)**
6. Answer: **g)**



Case Scenario #2: Febrile Neutropenia

Mason is a 4-year-old boy who was diagnosed seven months ago with ALL. He received chemotherapy a week and a half ago. His counts were last done in clinic two days ago and his neutrophil count was 0.80, which is down from the week before. His mother calls you at 4 PM to report that Mason has a temperature of 38.5°C.

Questions

1. From the initial information that you receive, what is the most concerning finding?
 - a) Mason was only diagnosed seven months ago.
 - b) Mason's neutrophil count appears to be dropping and it is within seven to ten days of his last chemotherapy administration.
 - c) Mason's mom has called at the end of your shift.
 - d) Mason's counts last week showed that he was not neutropenic.
2. Which one of the following questions is most important to ask?
 - a) Is this the first time Mason has ever had a temperature while on chemotherapy?
 - b) Do you have your protocol handy there?
 - c) How long has Mason had a temperature and have you treated it?
 - d) Do you have Gravol at home?
3. Based on the information you have obtained from Mason's mom over the phone, you do all of the steps below EXCEPT:
 - a) Direct mom to seek medical attention, giving timeframe and information on where to go (emergency, clinic, etc.).
 - b) Notify attending physician and other colleagues as appropriate.
 - c) Confirm that mom has transportation and is prepared to stay overnight.
 - d) Instruct mom to administer Tylenol prior to leaving for hospital.
4. Telephone nursing practice involves legal implications. Which of the actions below would you NOT take to lower your nursing practice risk?
 - a) Clarify any unclear information with the client/parent.
 - b) Limit jargon as much as possible so that the client/parent clearly understands your questions and advice.
 - c) Disregard cumbersome guidelines, as it takes too long to review while on the phone with client/parent.
 - d) Thoroughly assess and collect data that allows you to critically analyze the situation.



5. Which of the following items should be included in your documentation? (Choose all that apply.)
- a) Date and time of telephone encounter.
 - b) Information received.
 - c) Advice and information given.
 - d) Referral and follow-up information.
 - e) Recommended timeframe for caller to seek care.
 - f) Client's or parent's verbal response and understanding of the information.
 - g) Your signature and designation.

See [here](#) for a list of review questions for reflective practice.

Case Scenario #2: Answers

1. Answer: **b)**
2. Answer: **c)**
3. Answer: **d)**
4. Answer: **c)**
5. Answer: **All options should be chosen**



Case Scenario #3: Nausea and Vomiting

Ashmara is a 2-year-old girl with High-Risk ALL. She is currently being treated on the intensification phase of treatment, which involves Vincristine, Daunomycin, and Asparaginase as well as oral Dexamethasone and 6MP. She has had some nutritional issues requiring a nasogastric tube.

Ashmara's mother calls you because Ashmara has been vomiting overnight and her temperature is 37.6°C orally. Ashmara received an injection of Asparaginase four days ago.

Questions

1. What other information would you need to know?
 - a) What is Ashmara's immediate status? Is she lethargic or decreased LOC? Do you have time to discuss this on the phone?
 - b) How long has Ashmara been febrile?
 - c) When was Ashmara's last wet diaper and how wet was it? What did her urine look like?
 - d) Does Ashmara have a dry mouth, a dry tongue, or lack of tears when crying?
 - e) Has Ashmara had any anti-emetics and when?
 - f) Does Ashmara have any abdominal pain? Is she constipated and when was her last bowel movement?
 - g) Have the parents been able to get fluids or other nutritional supports into Ashmara orally or via the NG tube? How much compared to requirements set up by Nutrition?
 - h) When and what were Ashmara's last blood counts?
 - i) All of the above.

Ashmara's mother indicates that Ashmara is playing but more sleepy than usual. She has had a wet diaper in the last 12 hours with a small formed stool. Mom has not given any anti-emetics. Mom has some Ondansetron at home. Bloodwork four days ago was within normal limits. Ashmara has tears and her lips are moist.

2. Based on the information provided to you by Ashmara's mom, which path would you follow on the [symptom assessment and guidance](#)?
 - a) Emergent
 - b) Urgent
 - c) Non-Urgent
3. What would you advise Ashmara's mom to do initially?
 - a) Give the anti-emetics as prescribed.
 - b) Give Ashmara sips frequently.

- c) Come to the hospital as soon as possible.
 - d) Give acetaminophen as prescribed.
 - e) Give full diet via NG tube.
4. You encourage Ashmara's mom to call back if:
- a) Ashmara continues to vomit.
 - b) Ashmara is unable to drink.
 - c) Ashmara has had a dry diaper for 12 or more hours.
 - d) Ashmara develops a fever greater than 38°C orally.
 - e) All of the above.

See [here](#) for a list of review questions for reflective practice.

Case Scenario #3: Answers

1. Answer: i)
2. Answer: c)
3. Answer: a)
4. Answer: e)





Appendix C

Nursing Telepractice Documentation Record

The POGO Task Force developed example fillable PDF and Word versions of the Nursing Telepractice Documentation Record, both of which may be found on the POGO website. Please utilize the documentation protocol of your institution.

- [Fillable PDF version](#)
- [Fillable Word version](#)

