Meeting nursing standards in chemotherapy administration education: One province’s approach

by Bernadine O’Leary

It is indisputable that the administration of chemotherapy and biotherapy agents is a complex process, involving high-risk agents, various administration devices and caring for patients with unpredictable outcomes. This complexity has long been recognized by national and provincial nursing regulatory bodies throughout Canada. The Cancer Care Program of Eastern Health in Newfoundland and Labrador has mandated that registered nurses who administer chemotherapy complete a recognized educational program, with theoretical and clinical components in the administration and care of patients receiving chemotherapy (2011). The Association of Registered Nurses of Newfoundland and Labrador (ARNNL) has designated chemotherapy administration as a Specialty Nursing Competency, involving a higher level of complexity than a basic nursing competency and requiring further education and training before competency is achieved. Similarly, the Canadian Association of Nurses in Oncology (CANO) Standards and Competencies for Cancer Chemotherapy Nursing Practice (2011) clearly delineates the educational requirements for developing competence in cancer chemotherapy administration, again recommending that the education program include a theoretical and clinical evaluation component. This article highlights our experience in Newfoundland and Labrador in organizing and delivering education for chemotherapy administration across the province.

The preparation of nurses for the specialty competency of chemotherapy administration began in Newfoundland and Labrador in 1984. The learning need was identified by an oncology nurse, and a hospital-sponsored chemotherapy course was designed. Initially it was offered to site-based oncology nurses in inpatient and outpatient clinical areas and allowed for 16 hours of classroom instruction followed by a clinical practicum. A multidisciplinary team, consisting of physicians, a clinical pharmacist, and oncology nurses from both inpatient and outpatient treatment areas, was assembled to consult on content development. Content covered chemotherapy drugs, administration, and side effects, but also included content that addressed more general nursing care of the patient with cancer.

In the mid-1990s the Canadian Association of Nurses in Oncology published the Standards for Nursing Practice and Education Related to the Administration of Cancer Chemotherapy. The publication of these guidelines prompted a review of our adult chemotherapy course, and content was revised to meet these standards. Essentially, the focus of the content shifted solely to content relevant to chemotherapy administration.

As efforts were made in recent years to deliver chemotherapy as close to home as possible for the people of Newfoundland and Labrador, the increased need for chemotherapy certified registered nurses in both inpatient and ambulatory treatment centres across the province became apparent. The increasing demand for education about chemotherapy administration made the impracticalities of coordinating and delivering the chemotherapy course as a two-day, 16-hour in class format apparent. Challenges with RN scheduling and replacement, costs associated with candidate travel and accommodation, as well as reductions in benefits for education activities made the classroom format cost prohibitive. The chemotherapy course was temporarily offered to registered nurses as a self-learning package until a more stable, standardized approach was developed. In 2010, Eastern Health’s Adult Chemotherapy Course made its online debut after much hard work by registered nurses and technical support staff of the health authority’s Learning and Development Department. These initial online courses laid a very solid, successful foundation on which to build the current course.

In 2012, the Cancer Care Program of Eastern Health became the custodians of the Adult Chemotherapy Course. We partnered with the health authority’s Learning and Organizational Development Department and the College of the North Atlantic for technical support. Two important processes and recommendations used for the original course in 1984 remain in place today, despite the number of transitions in course delivery: 1) an oncology nurse-led working group remains for content review with consultation from physicians and clinical pharmacists as needed, and 2) the criterion that registered nurses have one year practice in the oncology setting before competence in chemotherapy administration is obtained remains.

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Today, the content of Eastern Health’s Adult Chemotherapy course reflects the topics outlined in CANO’s Standards and Competencies for Cancer Chemotherapy Nursing Practice. Course content is divided into eight modules which cover topics such as the development of chemotherapy, cell biology, principles of chemotherapy administration, drug classifications, side effects, toxicity management, oncologic emergencies, routes of administration, safe handling, patient assessment, education, documentation and the role of pharmacy. Each module has a set of learning objectives to guide and support the learner, as well as a post-module quiz.

The course includes six weekly assignments focusing on issues not covered in the course content. These assignments are reflective of current issues in chemotherapy administration such as agency policies impacting chemotherapy administration, the learner’s views on continuing chemotherapy administration competency and patient education resources. The last of these assignments are two comprehensive chemotherapy clinical case studies which help synthesize knowledge and concepts learned throughout the course. Proficiency with peripheral and central I.V. access is pre-requisite for the course. Infusion system training, as required, is a pre-requisite for the course. Proficiency with peripheral and central I.V. access is pre-requisite for the course. Infusion system training, as required, by Accreditation Canada Standards, is to be provided by agencies and programs throughout the provincial health authorities.

Eight weeks is allotted for the theoretical component of the course followed by an online exam early in the ninth week. A mark of 80% is required on the exam; passing the final exam is required for success in the course. Course assignments are weighted 20% of the final course mark. If unsuccessful with the first exam, an opportunity for a second exam is provided to the candidate within two weeks. If unsuccessful with the second exam, it is recommended the entire course be repeated. Following successful completion of the examination for the theoretical component of the course, a clinical practicum is to be completed.

The clinical practicum is arranged under the supervision of a chemotherapy certified registered nurse, and requires the successful administration of two infusional agents and two vesicants. Competency and proficiency is not limited to drug administration itself, but rather the comprehensive care of the patient receiving that agent, including patient assessment, all required pre-administration checks, successful venous access, drug administration, patient and drug monitoring, patient teaching, and documentation. This practicum adds approximately 16 hours to the overall course time. It is recommended that the practicum be completed within three months of the theoretical component of the course. Challenges with human resources and chemotherapy regimens in certain areas have resulted in a six-month timeframe to meet this requirement. At the end of the theoretical component of the course, students evaluate the course and provide feedback on presentation of content, recommended timelines and schedules and assignments. This feedback is then utilized by the working group in the revision and improvement of course content.

The course is offered twice per year and is open to registered nurses from all regions of Newfoundland and Labrador who require competency in chemotherapy administration. The course facilitator works with managers and educators throughout the province to identify and prioritize candidates for the course. Between 12 and 15 candidates are accepted for each course. Since the spring of 2013, 28 registered nurses from across the province have successfully completed the course. Interest in and demand for the course is high. It is frequently monitored should any additional courses during the year need to be offered.

The work to maintain Eastern Health’s Adult Chemotherapy Course and chemotherapy competency is ongoing and constantly evolving. The CANO standards in 2011 outline the importance of registered nurses demonstrating continuing competency in chemotherapy administration each year. Registered nurses who administer chemotherapy must be supported by their agencies in competency maintenance.

Much consideration has been given to ongoing competency within our Cancer Care Program. With the recent implementation of a new Acute Care Model of Nursing, a process for demonstrating annual competence is being considered with the use of reflective practice, self-assessment tools, competency checklists, and continuing education.

The working group is committed to the constant revisions and updates required to keep the content up to date and meeting the national standards. This work includes the addition of new agents and organizational guidelines and policies that impact chemotherapy administration. The working group is also challenged to ensure the right candidates are accessing the course. With an aging nursing workforce and much transition in registered nurse positions, the working group must continue to work with managers to address and prioritize resource needs in all treatment areas of the province.

An abundance of literature from many disciplines exists to support on-line learning. Online courses such as Eastern Health’s Adult Chemotherapy Course offered over an eight-week period have many benefits. An online format allows for self-paced learning. The course material is presented in a manner that allows the learner to reflect on the material in smaller sections over a longer duration providing ample time to focus on areas of difficulty. Eastern Health’s online course incorporates learning strategies such as post-module review quizzes, group discussion exercises and clinical case studies. These activities all enhance and augment learning and such strategies could never be presented in classroom format. The value of group discussion forums in an online course are invaluable, allowing the learner to draw upon the experiences of other registered nurses from various geographical locations and practice settings. Classroom format didactic process results in a more passive learner, rushed to record content and prepare for an exam, with little opportunity for reflection, asking questions and discussion. Another benefit to online learning in a province as vast as ours
Développement du Programme

Répondre aux normes infirmières relatives à l’éducation en administration de la chimiothérapie : l’expérience d’une province

par Bernadine O’Leary


À Terre-Neuve-et-Labrador, la préparation du personnel infirmier pour la compétence spécialisée en administration de la chimiothérapie a commencé en 1984. Une infirmière en oncologie avait cerné le besoin, et on a alors élaboré un cours de chimiothérapie par un médecin de l’hôpital. Ce cours était initialement offert à des infirmiers et infirmières en oncologie dont le travail portait sur des sièges spécifiques de la maladie et œuvrant dans des milieux cliniques de consultation interne et

is that it allows for consistency of content across the province, ensuring that all registered nurses, in various practice environments are receiving chemotherapy education that is meeting both provincial and national standards.

The online format for the delivery of chemotherapy education has worked well for Eastern Health. The evaluation process and feedback from participants has been favourable. However, this work is an ongoing process requiring constant evaluation, revision, and updating. It mirrors the oncology world itself! Our Cancer Care Program’s approach ensures that standards for chemotherapy education are met.

REFERENCES


Au sujet de l’auteure

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