



# The EONS Cancer Nursing Education Framework



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# Acknowledgements

This fourth edition, as in the previous three, depended on the contribution of many individuals. The European Oncology Nursing Society (EONS) is deeply appreciative to all those who made the four editions possible. Special thanks are due to Lena Sharp for her great leadership in this process, Iveta Nohavova who provided extensive project management support, and to Rebecca Verity and Patricia Fox for all the time and effort they devoted to the final writing stages and editing.

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EONS also extends warmest thanks to Merel van Klinken and Helena Ullgren who contributed to Module 5: Supporting People during Advanced Disease and at End of Life, to Cecilia Johnsson for design and layout and to Helen Oswald, EONS Communications Manager, for the final editing and proofing of the document.

#### **External reviewers**

We are extremely grateful to the many reviewers who contributed valuable feedback and suggestions (in alphabetical order).

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# Foreword from the EONS President

As President of the European Oncology Nursing Society (EONS), I am very proud to present the EONS Cancer Nursing Education Framework 2018!

The very first cancer nursing education document (EONS Post-basic Curriculum in Cancer Nursing) was developed by EONS in 1991 and was one of the first nursing initiatives to receive funding from the European Union's Europe Against Cancer (EAC) programme. The document was then extensively revised in 1998, 2013 and again recently to reflect the progress and developments within cancer care and cancer nursing. Updates and revisions have been funded by EONS. The extensive developments within cancer care, the expanding roles of cancer nurses and changes in educational structures were the main driving forces in the decision to revise and update the contents. In the current revision, we have changed the title to *EONS Cancer Nursing Education Framework* to better reflect the aim and purpose of the document. The development of this Framework is also an important part of the *RECaN project*, Recognizing European Cancer Nursing (Campbell et al, 2017). One of the purposes of this project is to promote cancer nursing as a specialty across Europe, based on a mutually agreed education framework.

This cancer nursing education document has proven to be very useful in many countries, with the previous version becoming the most downloaded document in EONS' history. It has been used for a great many purposes, for example as a reference to advocate for more hours of training on certain topics, to promote development of new national cancer nursing programmes and career possibilities, to support continuing education programmes and as guidance for other educational events.

The latest revision was initiated and led by members of the EONS Education Working Group but representatives from all EONS working groups have been actively involved. EONS' member organizations, European National Cancer Nursing Societies, have also been involved in the process together with other experts. For an overview of the developmental process, see Figure 1 below.

EONS members are advised to adapt this Framework to meet their specific professional needs within their country. To help guide the implementation of the Framework, suggestions on how to develop learning outcomes and how to link these to clinical competencies are provided.

I want to take this opportunity to thank all the cancer nursing experts involved in the development of this Framework. It has been a sincere pleasure to lead the process and I would particularly like to thank Rebecca Verity and Patricia Fox, the lead authors and project manager Iveta Nohavova for their incredible engagement and hard work.

A PDF version of the Framework is available at: [www.cancernurse.eu/education](http://www.cancernurse.eu/education)

Paper copies can be requested from the EONS Secretariat: [eons.secretariat@cancernurse.eu](mailto:eons.secretariat@cancernurse.eu)

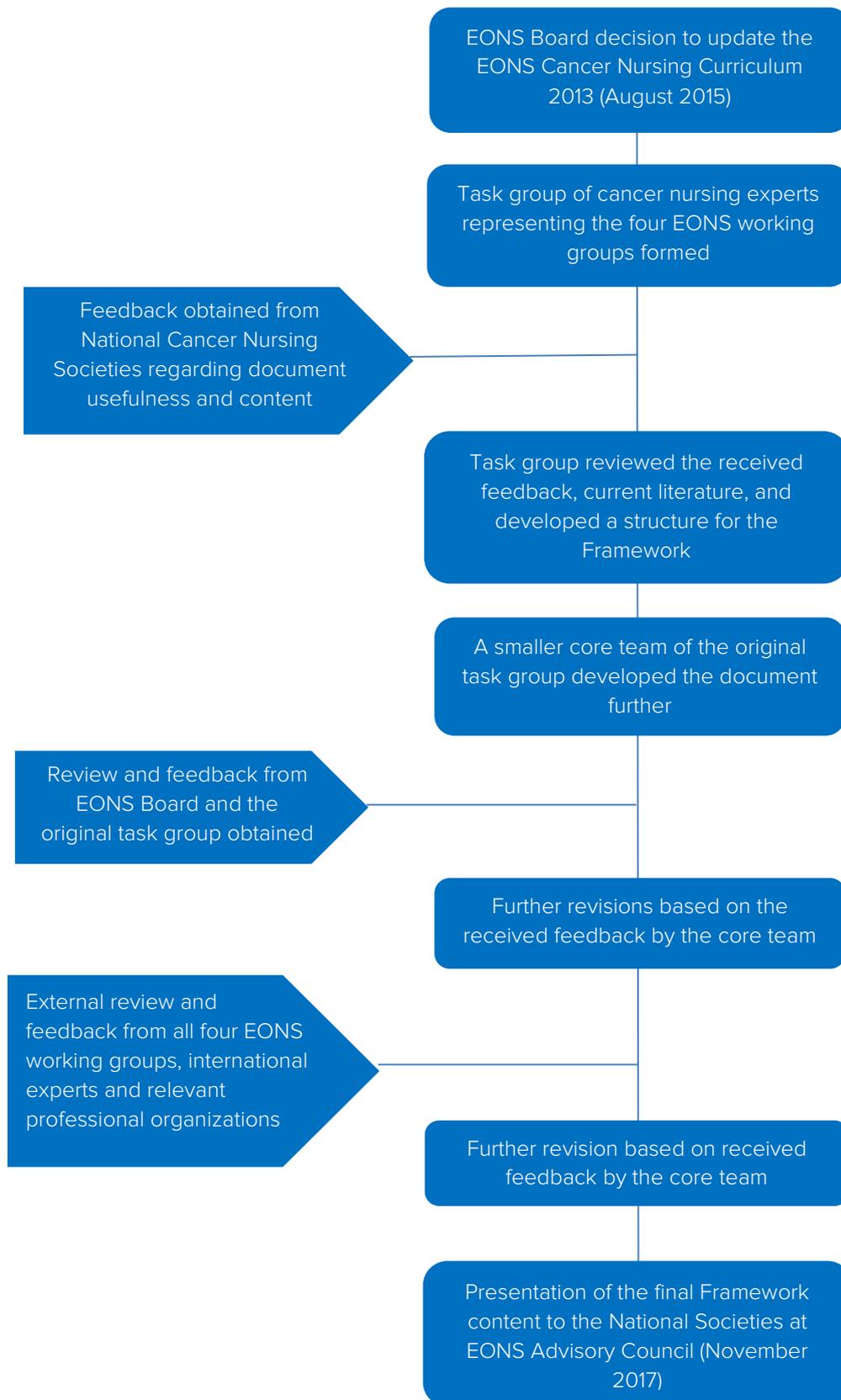
Please acknowledge the EONS Cancer Nursing Education Framework 2018 when using the document.



**Lena Sharp PhD, RN**

EONS President and Project lead for the EONS Cancer Nursing Education Framework 2018

**Figure 1: Review Process Overview**



# Glossary

Term	Definition
Advanced Practice Nurse	Registered nurse who has acquired the expert cancer nursing knowledge base, complex decision-making skills and clinical competencies for expanded practice, the characteristics of which are shaped by the context and/or country in which s/he is credentialed to practice. A master's degree is recommended for entry level. <a href="https://international.aanp.org/Practice/APNRoles">https://international.aanp.org/Practice/APNRoles</a>
Cancer nurse	It is the position of the European Oncology Nursing Society that a cancer nurse is a qualified nurse who has the authority and full responsibility to provide essential nursing care to people affected by cancer. This care is based upon their evidence-based, specialised, ethical and personal knowledge and skills. Cancer nurses are fully accountable in all cancer care settings and across the care continuum for all nursing services and associated patient outcomes provided under their direction.
Carers	Usually relatives but sometimes friends, whom the patient identifies as providing significant unpaid support and care, and as 'sharing the most' in their illness experience.
Chemoprevention	A method of disease prevention by long-term, usually lifelong, medication to modify risk factors.
Competencies	The knowledge, skills, values, and attitudes that are required for cancer nurses to carry out their work safely and effectively.
End of Life (EOL)	People are 'approaching the end of life' when they are likely to die within the next 12 months; this includes those whose death is imminent (expected within a few hours or days).
End of Life Care (EOLC)	Care which is provided to people who are nearing the end of life, including the necessary support to family members and significant others. Usually provided during the last year of life but this is often difficult to predict. The aim is to help people live as well as possible and to die with dignity.
Epidemiology	The study of the distribution of diseases and determinants of diseases in populations, including all forms of disease that relate to the environment and ways of life.
European Credit Transfer System (ECTS)	ECTS "is a learner-centred system for credit accumulation and transfer based on the principle of transparency of the learning, teaching and assessment processes. Its objective is to facilitate the planning, delivery and evaluation of study programmes and student mobility by recognising learning achievements, and qualifications and periods of learning" (ECTS Users' Guide, 2015).

Term	Definition
Evidence-based Practice (EBP)	Sackett et al. (2000) define EBP as “the conscientious, explicit and judicious use of current best evidence in making decisions about the care of the individual patient. It means integrating individual clinical expertise with the best available external clinical evidence from systematic research.”
Health literacy	People’s knowledge, motivation, and competences to access, understand, appraise, and apply health information. That is, to make judgments and take decisions in everyday life concerning healthcare, disease prevention, and health promotion to maintain or improve quality of life. (Sørensen et al., 2012).
Multi-professional teams	Teams consisting exclusively of professionals from different professions or disciplines. The terms inter/multi-disciplinary are broader and include all members of healthcare teams, professional and non-professional (Nancarrow et al., 2013).
Nursing-sensitive outcomes	Outcomes which define the end results of nursing interventions and are indicators of problem resolution or progress toward problem or symptom resolution. The ICN defines a nursing outcome as the measure or status of a nursing diagnosis at points in time after a nursing intervention, while nursing-sensitive outcomes are defined as changes in health status upon which nursing care has had a direct influence. Variables affecting patient outcomes include: diagnosis, socio-economic factors, family support, age and gender, and the quality of care provided by other professionals and support workers (ICN, 2009).
Palliative care	Is an approach that improves the quality of life of patients and their families facing the problems associated with life-threatening illness, through the prevention and relief of suffering by means of early identification and impeccable assessment and treatment of pain and other problems, physical, psychosocial and spiritual (WHO, 2002).
Patient-reported outcome (PRO)	A patient-reported outcome (PRO) is any report coming directly from a patient about a health condition and its treatment. The distinction between a PRO and an observer-generated report is that the PRO is a self-report made directly by the patient without being made through another party (Burke et al. 2006; Osoba 2007).
People affected by cancer (PABC)	People affected by cancer (PABC) refers to people affected by all types of cancer, including those at risk of developing cancer, people living with cancer, cancer survivors, carers, family members and significant others across the age spectrum and continuum of care (RCN, 2017).
Self-management	A dynamic, self-empowering, self-directed process of implementing behaviours that recognise, prevent, relieve or decrease the timing, intensity, distress, concurrence, and unpleasant quality of symptoms to achieve optimal performance outcomes. Thus, positive changes in self-management behaviour leads to the achievement of optimal performance outcomes such as functional status (Fu et al. 2004; Hoffman 2013).

Term	Definition
Supportive care	The prevention and management of the adverse effects of cancer and its treatment for PABC. This includes management of physical and psychological symptoms and side effects across the continuum of the cancer experience from diagnosis, through anticancer treatment, to post-treatment care. Enhancing rehabilitation, secondary cancer prevention, survivorship and end of life care are all integral to supportive care (Multinational Association of Supportive Care in Cancer (MASCC, 2015; NICE, 2004).
Survivorship	Living with, through and beyond cancer: Cancer survivorship begins at diagnosis and includes people who continue to have treatment over the long term, to either reduce the risk of recurrence or to manage the long-term effects of treatment and/or disease through the balance of his or her life. Family members, friends and carers are also impacted.

## BIBLIOGRAPHY AND RESOURCES

Bodenheimer, T., Lorig, K., Holman, H., Grumbach, K., 2002. Patient self-management of chronic disease in primary care. *JAMA*. 288(19): 2469-75.

Burke, L., Stifano, T., Dawisha, S., 2006. Food and Drug Administration draft: Guidance for industry sponsored patient-reported outcome measures. US Dept. of Health and Human Services, Food and Drug Administration.

Fu, M., LeMone, P., McDaniel, R., 2004. An integrated approach to an analysis of symptom management in patients with cancer. *Oncol. Nurs. Forum*. 31(1): 65–70.

Hoffman, A.J., 2013. Enhancing self-efficacy for optimized patient outcomes through the theory of symptom self-management. *Cancer Nurs*. 36(1): E16-26.

Nancarrow, S.A., Booth, A., Ariss, S., Smith, T., Enderby, P., Roots, A., 2013. Ten principles of good interdisciplinary team. *Hum. Resour. Health*. 11: 19.

National Institute for Clinical Excellence (NICE), 2004. Guidance on cancer services: improving supportive and palliative care for adults. NICE, London.

Osoba, D., 2007. Translating the science of patient-reported outcomes assessment into clinical practice. *J. Natl. Cancer Inst. Mono*. (37): 5-11.

Royal College of Nursing (RCN), 2017. Career and education framework for cancer nursing. RCN, London.

Sackett, D.L., Straus, S.E., Richardson, W.S., Rosenberg, W., Haynes, R.B., 2000. Evidence-based medicine: how to practice and teach EBM. Churchill Livingstone, London.

Sørensen, K., Van den Broucke, S., Fullam, J., Doyle, G., Pelikan, J., Slonska, Z., Brand, H., Consortium Health Literacy Project European, 2012. Health literacy and public health: A systematic review and integration of definitions and models. *BMC Public Health*. 12: 80.

World Health Organisation (WHO), 2002. Definition of palliative care. World Health Organisation, Geneva. <http://www.who.int/cancer/palliative/definition/en/> Accessed (17 January 2018).

# Introduction

The EONS Cancer Nursing Education Framework comprises eight modules which identify the fundamental knowledge and skills required for post-registration nurses working with people affected by cancer (PABC). The overall purpose of this Framework is to provide guidance regarding the knowledge, skills and competencies required by nurses who care for PABC as part of multi-professional teams across Europe. This Framework is particularly intended to provide guidance for structuring the learning content of cancer nursing programmes to those individuals and teams who are involved in the education, training and professional development of cancer nurses across Europe.

The modules address the key subject areas which underpin cancer nursing practice with a view to meeting cancer nurses' learning needs around the provision of high quality care to PABC. Reflecting the cancer trajectory, the first five modules focus on the key knowledge, skills and competencies that cancer nurses require from cancer prevention to end-of-life care. The last three modules address communication, leadership and management and research; however, given their critical importance in the context of cancer care, it is intended that these concepts are incorporated across all the modules.

**Figure 2: Overview of the Framework**



Learning outcomes (what the learner should know) and their relevant practice competencies are identified for each of the eight modules. The learning outcomes seek to address a variety of cognitive levels to encourage more complex learning, such as evaluation, rather than just the demonstration of knowledge and comprehension. The content section is intended to provide guidance regarding the key concepts that need to be addressed in the respective modules to enable 'the learner' to achieve the learning outcomes and practice competencies for each.

With a view to assisting educators and clinical instructors, the bibliography and resources include recent and seminal literature relevant to each of the modules. The content and resources sections include national as well as international standards and policies where relevant.

The Framework employs the European Credit Transfer System (ECTS) to identify the workload associated with each of the modules and their explicit learning outcomes. A total of 60 ECTS credits are allocated to the learning outcomes and associated workload of a full-time academic year or its equivalent. In general, student workload ranges from 1,500 to 1,800 hours for an academic year, which means that one credit corresponds to 25 to 30 hours of work (ECTS Users' Guide, 2015). For the Framework, each ECTS credit corresponds to a norm of 30 hours of total learner effort. The number of ECTS credits assigned to each module varies, ranging from six to nine ECTS (depending on the associated workload) for an overall total of 54.

On completion of all eight modules, it is recommended that learners be encouraged to undertake a self-directed piece of work. Learners therefore, could obtain a further six ECTS through undertaking a substantial written piece of work, e.g. a portfolio of evidence combining critical reflection. This document should aim to demonstrate overall learning from the programme of study.

As it is anticipated that the resources available for teaching and assessment will vary across the countries that will use this Framework, a variety of methods are suggested (see below). However, where possible, it is recommended that educators employ several different teaching and assessment strategies across all the modules to facilitate different learning styles. This is to provide learners with opportunities to play to their strengths and to learn from feedback provided during formative assessments.

## **Recommended Teaching and Learning Methods**

There are many teaching methods which could be employed, including:

- Lectures
- Guided reading
- Critical reflections
- Clinical visits – to wards, clinical treatment centers, out-patient departments
- Laboratory visits
- Case studies
- Group assignments to promote teamwork
- Discussion sessions
- Debates
- Enquiry-based learning (EBL)
- E-learning resources
- Role play (particularly important strategy for improving communication skills) and simulation (with or without actors)
- Simulated learning.

## Recommended Assessment Methods

Several different assessment methods may also be employed, where relevant, to assess theoretical and practical knowledge.

Suggested Methods for Assessment of Subject Knowledge	Methods for Assessment of Clinical Competencies
Case studies Exam (written) Multiple choice examinations (MCQs) Essays Objective structured clinical examinations (OSCEs)	Observation in practice Conducting holistic assessments/consultations Written person-centered care plans Delivery of patient education and information Case studies Practical observed examinations A plan for changing or development of an aspect of clinical practice or service delivery Preparation and delivery of education/teaching sessions for colleagues Critical reflections Portfolio of evidence

### BIBLIOGRAPHY AND RESOURCES

Campbell, P., Torrens, C., Kelly, D., Charalambous, A., Domenech-Clement, N., Nohavova, I., Ostlund, U., Patiraki, E., Salisbury, D., Sharp, L., Wiseman, T., Oldenmenger, W., Wells, M., 2017. Recognizing European cancer nursing: Protocol for a systematic review and meta-analysis of the evidence of effectiveness and value of cancer nursing. *J. Adv. Nurs.* 00: 1–10. <https://doi.org/10.1111/jan.13392>

ECTS Users' Guide, 2015. Publications office of the European Union: Luxembourg. [http://ec.europa.eu/education/ects/users-guide/docs/ects-users-guide\\_en.pdf](http://ec.europa.eu/education/ects/users-guide/docs/ects-users-guide_en.pdf) Accessed (17 January 2018).

# Module 1

## Risk Reduction, Early Detection and Health Promotion in Cancer Care



**Suggested ECTS credit points: 6**

Contact hours: 60 hours

Study hours with practice: 120 hours

### **MODULE OVERVIEW**

The overall aim of this module is to enhance the learner's knowledge and skills regarding cancer epidemiology with a view to enabling him/her to play a central role in the context of risk reduction and the early detection of cancer.

Cancer is a major cause of morbidity and mortality globally. As people are living longer, cancer incidence and mortality are expected to continue to increase because of the strong relationship between cancer and advancing age. Epidemiology plays a pivotal role in cancer risk reduction and control by describing the distribution of cancer and discovering risk factors for the disease.

This module introduces the learner to key concepts which have shaped the development of cancer services at national and international levels. More specifically, it focuses on the epidemiology of cancer with respect to the occurrence, distribution and determinants of cancer. Risk reduction strategies, cancer screening and early detection are also addressed.

	LEARNING OUTCOMES At the end of this module, cancer nurses will be able to:	PRACTICE COMPETENCIES At the end of this module, cancer nurses will be able to:	LEARNING CONTENT (in alphabetical order)
1.	Describe the epidemiology of cancer.	Describe the occurrence and distribution of the most common cancers with a focus on Europe and nurses' own country.	<p>Cancer epidemiology among migrants and refugees.</p> <p>Occurrence of cancer (i.e. incidence, prevalence, survival and mortality rates) and distribution (i.e. age, sex and region) of the most common cancers.</p> <p>Where applicable, utilise national cancer registry data and WHO Global Cancer Country Profiles to describe the occurrence and distribution of cancers in nurse's own country.</p>
2.	Examine the modifiable and non-modifiable determinants of cancer.	<p>Undertake a comprehensive history to identify the individual, familial, genetic, sociocultural, economic and environmental factors which may increase the risk for developing cancer.</p> <p>Identify and explain the multifactorial causes of cancer to PABC.</p>	<p>Knowledge on determinants of cancer (e.g. genetic predisposition, family history, environmental influences, infectious agents, nutritional factors, hormonal and reproductive factors, lifestyle, age, socioeconomic, cultural factors, random errors in DNA copying).</p> <p>Most common genetic mutations/syndromes (e.g. BRCA 1/2, APC, MLH1, MSH 2) in cancer setting.</p>
3.	Describe risk reduction strategies, genetic screening for cancer and appropriate health promotion strategies.	<p>Provide evidence-based verbal and written information regarding life-style related, surgical and chemoprevention risk-reducing strategies for cancer which is appropriate and individualised to PABC.</p> <p>Provide evidence-based verbal and written information regarding genetic screening for cancer which is appropriate and individualised to PABC.</p>	<p>Barriers to effective information provision (e.g. age, language, cultural, health literacy, impaired hearing/vision).</p> <p>Cancer strategy/policy (at a national and European level).</p> <p>Challenges regarding screening and early detection of cancer among migrants and refugees.</p>
4.	Examine current cancer screening strategies.	Provide appropriate and individualised, evidence-based verbal and written information regarding the benefits and	Early signs and symptoms of the most common cancers.

LEARNING OUTCOMES At the end of this module, cancer nurses will be able to:	PRACTICE COMPETENCIES At the end of this module, cancer nurses will be able to:	LEARNING CONTENT (in alphabetical order)
	risks of screening for cancer to PABC.	Evidence-based interventions focusing on genetic testing and cancer screening (including literature on the benefits and limitations of screening).
5. Identify the signs and symptoms of the most common cancers and explain the concept of early detection.	Guided by appropriate health promotion theories/health belief models, provide evidence-based verbal and written information regarding early signs and symptoms of common cancers and when and who to contact at the onset of symptoms.	Evidence-based interventions focusing on the following: tobacco cessation, dietary modification, bariatric surgery, alcohol reduction, exercise interventions, UV and ionizing radiation protection, vaccination, pollution control, occupational safety, prophylactic surgery and chemoprevention.
6. Evaluate the nurse's role with reference to risk reduction and early detection in the context of cancer.	<p>Demonstrate use of a range of effective communication skills/strategies to provide information, psychological and emotional support to individuals and communities about cancer, the risk of developing cancer and strategies to reduce risk, including the value of engagement in screening programmes for early detection.</p> <p>Encourage individuals and family members to utilise appropriate local, national and/or international cancer organisations for further information, psychosocial support and/or financial support.</p>	<p>Health belief theories and health behaviour change theories.</p> <p>Health promotion and health education.</p> <p>Implications of delayed diagnosis.</p> <p>Influence of health policy on individuals and their decision-making.</p> <p>Psychosocial approaches and support organisations of relevance at the outset of a cancer diagnosis (i.e. during diagnostic and staging process).</p> <p>Screening programmes and early detection/rapid access clinics.</p> <p>Social and cultural attitudes to cancer.</p>

## BIBLIOGRAPHY AND RESOURCES

Benito, L., Binefa, G., Lluch, T., Vidal, C., Milà, N., Puig, M., Roldán, J., Garcia, M., 2014. Defining the role of the nurse in population-based cancer screening programmes. *Clin. J. Oncol. Nurs.* 18(4): E77-83.

Birks, S., Peeters, A., Backholer, K., O'Brien, P., Brown, W., 2012. A systematic review of the impact of weight loss on cancer incidence and mortality. *Obes. Rev.* 13(10): 868-91.

Dahlhaus, A., Guethlin, C., Schall, A., Taubenroth, M., van Ewijk R., Zeeb, H., Albay, Z., Schulz-Rothe, S., Beyer, M., Gerlach, F.M., Blettner, M., Siebenhofer, A., 2014. Colorectal cancer stage at diagnosis in migrants versus non-migrants (KoMigra): study protocol of a cross-sectional study in Germany. *BMC Cancer.* 14: 123. doi:10.1186/1471-2407-14-123.

Chorley, A.J., Marlow, L.A., Forster, A.S., Haddrell, J.B., Waller J., 2017. Experiences of cervical screening and barriers to participation in the context of an organised programme: A systematic review and thematic synthesis. *Psychooncology.* 26(2): 161-172.

Colditz, A., Wolin, K.Y., Gehlert S., 2012. Applying what we know to accelerate cancer prevention. *Sci. Transl. Med.* 28;4(127): 127 rv4.

Cushen, S., Ryan, A., Burns, L., Kenny, U., Power, DG., 2012. Poor knowledge of risk factors for cancer amongst public and healthcare professionals. European Society for Medical Oncology Conference, Vienna, 30 September, 2012.

Cuzick, J., Sestak, I., Bonanni, B., Costantino, J.P., Cummings, S., DeCensi, A., Dowsett, M., Forbes, J.F., Ford, L., LaCroix, A.Z., Mershon, J., Mitlak, B.H., Powles, T., Veronesi, U., Vogel, V., Wickerham, D.L. (SERM Chemoprevention of Breast Cancer Overview Group), 2013. Selective oestrogen receptor modulators in prevention of breast cancer: An updated meta-analysis of individual participant data. *Lancet.* 381(9880): 1827-34.

Dallred, C.V., Dains, J.E., Corrigan, G., 2012. Nursing workforce issues: Strategically positioning nurses to facilitate cancer prevention and control. *J. Cancer. Educ.* 27(2 Suppl.): S144-8.

Dart, H., Wolin, K.Y., Colditz, G.A., 2012. Commentary: Eight ways to prevent cancer: A framework for effective prevention messages for the public. *Cancer Causes Control.* 23(4): 601-8.

Doré, C., Gallagher, F., Saintonge, L., Hébert, M., 2013. Breast cancer screening programme: Experiences of Canadian women and their unmet needs. *Health Care Women Int.* 34(1): 34-49.

Esserman, L., Shieh, Y., Thompson, I., 2009. Rethinking screening for breast cancer and prostate cancer. *JAMA.* 302(15): 1685-92.

Ferlay, J., Steliarova-Foucher, E., Lortet-Tieulent, J., Rosso, S., Coebergh, J.W., Comber, H., Forman, D., Bray, F., 2013. Cancer incidence and mortality patterns in Europe: Estimates for 40 countries in 2012. *Eur. J. Cancer.* 49(6): 1374-1403.

Gøtzsche, P.C., Jørgensen, K., 2013. Screening for breast cancer with mammography. *Cochrane Database of Systematic Reviews.* Issue 6. Art. No.: CD001877. doi: 10.1002/14651858.CD001877.pub5. <http://summaries.cochrane.org/CD001877/screening-for-breast-cancer-with-mammography#sthash.97oVesSL.dpuf> Accessed (17 January 2018).

Iredale, R., Brain, K., Gray, J., France, E., 2003. The information and support needs of women at high risk of familial breast and ovarian cancer: How can cancer genetic services give patients what they want? *Fam. Cancer.* 2: 119-121.

International Agency for Research on Cancer: European code against cancer. <http://cancer-code-europe.iarc.fr/index.php/en/> Accessed (17 January 2018).

Kobayashi, L.C., Smith, S.G., 2016. Cancer fatalism, literacy, and cancer information seeking in the American public. *Health. Educ. Behav.* 43(4): 461-70.

Kohler, L.N., Garcia, D.O., Harris, R.B., Oren, E., Roe, D.J., Jacobs, E.T., 2016. Adherence to diet and physical activity cancer prevention guidelines and cancer outcomes: A systematic review. *Cancer Epidemiol. Biomarkers Prev.* 25(7): 1018-28.

Kösters, J.P., Gøtzsche, P.C., 2003. Regular self-examination or clinical examination for early detection of breast cancer. [http://www.cochrane.org/CD003373/BREASTCA\\_regular-self-examination-or-clinical-examination-for-early-detection-of-breast-cancer](http://www.cochrane.org/CD003373/BREASTCA_regular-self-examination-or-clinical-examination-for-early-detection-of-breast-cancer) Accessed (17 January 2018).

Liao, M.N., Chen, M.F., Chen, S.C., Chen, P.L., 2007a. Healthcare and support needs of women with suspected breast cancer. *J. Adv. Nurs.* 60(3): 289-298.

Liao, M.N., Chen, M.F., Chen, S.C., Chen, P.L., 2007b. Uncertainty and anxiety during the diagnostic period for women with suspected breast cancer. *Cancer Nurs.* 31(4): 274-283.

Lin, J.S., Piper, M.A., Perdue, L.A., Rutter, C.M., Webber, E.M., O'Connor, E., Smith, N., Whitlock, E.P., 2016. Screening for colorectal cancer: Updated evidence report and systematic review for the U.S. preventive services task force. *JAMA.* 315(23): 2576-94.

Marmot, M.G., Altman, D.G., Cameron, D.A., Dewar, J.A., Thompson, S. G., Wilcox, M., 2013. The benefits and harms of breast cancer screening: An independent review. *Br. J. Cancer.* 108: 2205–2240.

Miles, A., Voorwinden, S., Chapman, S., Wardle, J., 2008. Psychologic predictors of cancer information avoidance among older adults: The role of cancer fear and fatalism. *Cancer Epidemiol. Biomarkers Prev.* 17(8): 1872-1879.

Moyer, V.A., 2012. Screening for Cervical Cancer: U.S. preventive services task force recommendation statement. *Ann. Intern. Med.* 156(12): 880-891.

National Institute for Health and Care Excellence (NICE), 2007 (updated 2014). Behavioural change: general approaches. Public health guideline [PH6]. <https://www.nice.org.uk/guidance/ph6> Accessed (17 January 2018).

National Comprehensive Cancer Network (NCCN), 2017. NCCN guidelines for detection, prevention, & risk reduction. [https://www.nccn.org/professionals/physician\\_gls/f\\_guidelines.asp#detection](https://www.nccn.org/professionals/physician_gls/f_guidelines.asp#detection) Accessed (17 January 2018).

Nelson, H.D., Pappas, M., Cantor, A., Griffin, J., Daeges, M., Humphrey, L., 2016. Harms of breast cancer screening: Systematic review to update the 2009 U.S. preventive services task force recommendation. *Ann. Intern. Med.* 164(4): 256-67.

Rice, V.H., Hartmann-Boyce, J., Stead, L.F., 2013. Nursing interventions for smoking cessation. *Cochrane Database Syst. Rev.* Issue 8. Art. No.: CD001188. doi:10.1002/14651858.CD001188.pub4.

Rigotti, N.A., Clair, C., Munafò, M.R., Stead, L.F., 2012. Interventions for smoking cessation in hospitalised patients. *Cochrane Database Syst. Rev.* Issue 5. Art. No.: CD001837. doi:10.1002/14651858.CD001837.pub3.

Schröder, F.H., Hugosson, J., Roobol, M.J., Tammela, T.L., Zappa, M., Nelen, V., Kwiatkowski, M., Lujan, M., Mänttinen, L., Lilja, H., Denis, L.J., Recker, F., Paez A., Bangma, C.H., Carlsson, S., Puli, D., Villers, A., Rebillard, X., Hakama, M., Stenman, U.H., Kujala, P., Taari, K., Aus, G., Huber, A., van der Kwast, T.H., van Schaik, R.H., de Koning, H.J., Moss, S.M., Auvinen, A., for the ERSPC Investigators, 2014. Screening and prostate cancer mortality: results of the European randomised study of screening for prostate cancer (ERSPC) at 13 years of follow-up. *Lancet.* 384(9959): 2027-2035.

Tomasetti, C., Vogelstein, B., 2015. Variation in cancer risk among tissues can be explained by the number of stem cell divisions. *Science.* 347(6217): 78–81. doi:10.1126/science.1260825.

Ueland, A.S., Hornung, P.A., Greenwald, B., 2006. Colorectal cancer prevention and screening: A health belief model-based research study to increase disease awareness. *Gastroenterol. Nurs.* 29(5): 357-63.

Whitlock, E.P., Williams, S.B., Burda, B.U., Feightner, A., Beil, T., 2015. Aspirin Use in Adults: Cancer, All-Cause Mortality, and Harms: A Systematic evidence review for the U.S. preventive services task force [Internet]. Rockville (MD): Agency for Healthcare Research and Quality (US). Report No.: 13-05193-EF-1. U.S. Preventive Services Task Force Evidence Syntheses.

WHO Global cancer country profiles. <http://www.who.int/cancer/country-profiles/en> Accessed (17 January 2018).

World Cancer Research Fund International (WCRF), 2017. Cancer prevention and survival summary of evidence on diet, weight and physical activity. <http://www.wcrf.org/int/research-we-fund/continuous-update-project-findings-reports/summary-global-evidence-cancer> Accessed (17 January 2018).

Wyatt, D., Hulbert-Williams, N., 2015. Cancer and cancer care. Sage Publications, Lond

# Module 2

## Cancer Pathophysiology and the Principles of Treatment Decision Making

**Suggested ECTS credit points: 6**

Contact hours: 60 hours

Study hours with practice: 120 hours

### MODULE OVERVIEW

The overall aim of this module is to enhance the learner's knowledge and skills regarding cancer biology and the diagnosis and staging of cancer with a view to enabling him/her to support and facilitate the decision making of PABC in the context of localised, locally advanced or metastatic disease.

This module focuses on the biological processes that contribute to the development of cancer. It also addresses the diagnostic and staging process and the principles of cancer treatment decision making. The pathophysiology of cancer is important not only for understanding the process of cancer development in the first instance but also for enhancing our understanding of the rationale for the various local and systemic treatments which are administered to people with cancer. Of importance is the role of the nurse within the multi-professional team regarding supporting PABC throughout the process.

LEARNING OUTCOMES At the end of this module, cancer nurses will be able to:	PRACTICE COMPETENCIES At the end of this module, cancer nurses will be able to:	LEARNING CONTENT (in alphabetical order)
1. Describe the biological processes which lead to the development of cancer.	Provide PABC with evidence-based verbal and written information about the development of cancer with a view to addressing their informational and supportive care needs.	Biology of cancer including the hallmarks of cancer.
2. Describe the range of diagnostic and staging approaches used to establish a cancer diagnosis, the extent of the disease and prognosis.	Support PABCs through the diagnosis and staging process. Undertake initial and ongoing comprehensive assessments (using validated tools where appropriate) to identify PABCs' informational, physical, emotional and social care needs (where relevant) during the diagnostic and staging process.	Comprehensive history taking.  Diagnostic tests and investigations (tumour, node, metastasis (TNM)/equivalent appropriate staging), grading, biomarkers.
3. Analyse the nursing role in supporting PABC during the diagnostic and staging process for cancer (particularly in the context of their age-appropriate informational, physical, emotional and social care needs, where relevant).		Evidence-based nursing interventions focusing on the provision of support to PABCs during the diagnostic and staging process for cancer.  Nursing-sensitive outcomes in the diagnostic/staging process of cancer.
4. Discuss the different issues which need to be considered in order to support and facilitate patients' decision making in the context of localised, locally advanced or metastatic disease.	Undertake a comprehensive history to identify factors in addition to the cancer stage and grade which are important for optimal outcomes related to treatment decision making (e.g. performance status, comorbidities, medications, psychological and social factors, patient's care and treatment preferences).  Provide a supportive environment where PABC are encouraged to share their concerns and to express their preferences regarding the decisions made about their treatment.  Encourage PABC to utilise appropriate local, national and/or international cancer organisations for further information, psychosocial, spiritual and/or financial support.	Clinical practice guidelines (CPGs) /evidence-based resources (EBRs) from the main international medical cancer organisations.  Decision aids related to cancer treatment.  Goals of treatment: e.g. cure, control or palliation.  Multi-professional team decision making.  Local and systemic cancer treatments and active surveillance.  The role of clinical trials and the role of nurses in clinical trials.

## BIBLIOGRAPHY AND RESOURCES

- American Joint Commission on Cancer. Quick references: Cancer staging posters. <https://cancerstaging.org/references-tools/quickreferences/Pages/default.aspx> Accessed (17 January 2018).
- American Society of Clinical Oncology (ASCO). Assays and predictive markers. Available online at: <https://www.asco.org/practice-guidelines/quality-guidelines/guidelines/assays-and-predictive-markers> Accessed (17 January 2018).
- Beckjord, E.B., Arora, N.K., McLaughlin, W., Oakley-Girvan, I., Hamilton, A.S., Hesse, B.W., 2008. Health-related information needs in a large and diverse sample of adult cancer survivors: Implications for cancer care. *J. Cancer Surviv.* 2(3): 179-189.
- European Society for Medical Oncology (ESMO). Clinical practice guidelines for information on the current management of various cancers, including screening, diagnosis and staging and management of local/regional and metastatic disease. <http://www.esmo.org/Guidelines> Accessed (17 January 2018).
- European Society for Radiotherapy & Oncology (ESTRO). <https://www.estro.org/> Accessed (17 January 2018).
- European Society for Surgical Oncology (ESSO). Guidelines. <http://www.essoweb.org/guidelines/> Accessed (17 January 2018).
- Friedman, A.J., Cosby, R., Boyko, S., Hatton-Bauer, J., Turnbull, G., and the Patient Education Panel, 2009. Effective teaching strategies and methods of delivery for patient education. Cancer Care Ontario. <https://www.cancercareontario.ca/en/guidelines-advice/types-of-cancer/851> Accessed (17 January 2018).
- Hanahan, D., Weinberg, R.A., 2000. The hallmarks of cancer. *Cell.* 100(1): 57–70.
- Hanahan, D., Weinberg, R.A., 2011. The hallmarks of cancer: The Next Generation. *Cell.* 144(5): 646-674.
- Iwamoto, R.R., Haas, M.L., Gosselin, T.K., 2012. Manual for radiation oncology nursing practice and education, fourth ed. Oncology Nursing Society, Pittsburgh.
- National Comprehensive Cancer Network (NCCN), 2017. NCCN Guidelines for treatment of cancer by site. [https://www.nccn.org/professionals/physician\\_gls/f\\_guidelines.asp#site](https://www.nccn.org/professionals/physician_gls/f_guidelines.asp#site) Accessed (17 January 2018).
- O'Brien, M.A., Whelan, T.J., Villasis-Keever, M., Gafni, A., Charles, C., Roberts, R., Schiff, S., Cai, W., 2009. Are cancer-related decision aids effective? A systematic review and meta-analysis. *J. Clin. Oncol.* 27(6): 974-85. doi:10.1200/JCO.2007.16.0101.
- Tan, C.H., Wilson, S., McConigley, R., 2015. Experiences of cancer patients in a patient navigation programme: A qualitative systematic review. *JBI Database System Rev. Implement. Rep.* 13(2): 136-68.
- Trikalinos, T.A., Wieland, L.S., Adam, G.P., Zgodic, A., Ntzani, E.E., 2014. Decision aids for cancer screening and treatment. Rockville (MD): Agency for healthcare research and quality (US). Report No.: 15-EHC002-EF.m [AHRQ Comparative Effectiveness Reviews.](#)

# Module 3

## Cancer Treatment, Patient and Occupational Safety

**Suggested ECTS credit points: 9**

Contact hours: 90 hours

Study hours with practice: 180 hours



### **MODULE OVERVIEW**

The overall aim of this module is to develop the learner's knowledge and skills to safely deliver and manage the impact of therapies which are used to treat cancer.

Cancer nurses play a pivotal role within the multi-professional team in the safe delivery and management of therapies used to treat cancer. An important aspect of the nursing role within the treatment context is to appropriately assess and manage treatment related adverse effects and toxicities. Cancer nurses must also provide relevant and timely information to ensure that PABC can engage in clinical decision-making about their treatment, care and management to enable informed consent, and to understand their treatment and its potential side effects in order to self-manage these. Cancer nurses therefore, require knowledge about the principles, mechanisms and impact of cancer treatments. Within this module the core skills underpinning the provision of safe practice within cancer healthcare settings will also be addressed.

LEARNING OUTCOMES	PRACTICE COMPETENCIES	LEARNING CONTENT (in alphabetical order)
<p>At the end of this module, cancer nurses will be able to:</p> <p>1. Describe the principles of local and systemic cancer treatments and demonstrate understanding of the different treatment modalities.</p>	<p>At the end of this module, cancer nurses will be able to:</p> <p>Provide information in a range of formats and explain to PABC, at an appropriate level and pace, the range of cancer treatments available to facilitate patients' involvement in clinical decision-making about their treatment, care and management.</p> <p>Provide a supportive environment in which PABC are encouraged to ask questions and share their concerns about their disease and treatment.</p> <p>Advocate for and promote, PABC involvement in decision-making about treatment, care and management.</p>	<p>Chemotherapy.</p> <p>Clinical trials.</p> <p>Combined treatment modalities.</p> <p>Haemopoietic stem cell transplantation.</p> <p>Hormone therapies.</p> <p>Immunotherapies.</p> <p>Integrative oncology.</p> <p>Multi-modal treatment pathways.</p> <p>Pharmacodynamics.</p> <p>Pharmacology and pharmacokinetics.</p> <p>Radiotherapy.</p> <p>Surgery.</p> <p>Targeted therapies.</p> <p>Tumor vaccines.</p>
<p>2. Identify the acute, chronic and late toxicities of cancer treatments.</p> <p>Identify the evidence to reduce the risk of, and/or manage these effects.</p>	<p>Educate PABC to monitor for and report signs of acute, chronic and late toxicities of cancer treatments.</p> <p>Use evidence-based interventions to assess, prevent and manage treatment toxicities.</p> <p>Know when to refer to and involve other healthcare providers.</p>	<p>Assessment tools for toxicities.</p> <p>Current evidence and local/national/international policies/guidelines for the management of acute, chronic and late toxicities side effects of cancer treatments.</p>
<p>3. Describe and demonstrate how cancer treatments are delivered safely and effectively.</p>	<p>Be involved in the delivery of treatment within their scope of practice and requirements of the healthcare setting.</p> <p>Provide continuity and help coordinate PABCs' care during treatment and document this.</p>	<p>Adherence to cancer treatment.</p> <p>Drug-herb interactions.</p> <p>European and national policies on safety.</p>
<p>4. Explain the range of support required and available to PABC throughout their treatment.</p>	<p>Educate PABC regarding the practical skills required for effective treatment and self-care interventions where relevant.</p>	<p>Extravasation.</p> <p>Chemotherapy spillage.</p> <p>Personal protective equipment.</p>

LEARNING OUTCOMES At the end of this module, cancer nurses will be able to:	PRACTICE COMPETENCIES At the end of this module, cancer nurses will be able to:	LEARNING CONTENT (in alphabetical order)
	<p>Recognise the hazards associated with cancer treatments and take preventative actions to minimise these and comply with local and national safety regulations, legislation and guidelines.</p> <p>Provide information and support to and act as a role model for colleagues to ensure safe practice in the treatment settings.</p>	<p>Radiation safety.</p> <p>Safe handling, storage, administration and disposal of cytotoxic drugs.</p> <p>Resources for safe delivery of cancer treatments.</p> <p>Routes of administration.</p> <p>Safety at home.</p> <p>Self-care strategies.</p> <p>Surgical safety.</p> <p>Telephone triage and supportive care resources.</p> <p>Treatment pathways.</p>
5. Explain treatment-related emergencies and the signs/symptoms experienced by PABC.	<p>Use evidence-based interventions to assess, prevent and assist in the management of emergencies caused by cancer therapies.</p> <p>Know when to refer to and involve other healthcare providers.</p>	<p>Acute cerebral oedema.</p> <p>Acute reactions to chemotherapy, targeted therapies and immunotherapy.</p> <p>Acute reactions to radiation (e.g. skin and mucosal reactions, pneumonitis).</p> <p>Anaphylaxis.</p> <p>Anemia.</p> <p>Hemorrhagic cystitis.</p> <p>Hypercalcemia</p> <p>Hypersensitivity reactions.</p> <p>Neutropenic sepsis and septic shock.</p> <p>Pathological fractures.</p> <p>Peripheral neuropathy.</p> <p>Post-surgery complications.</p> <p>Spinal cord compression.</p> <p>Thrombocytopenia.</p> <p>Tumour lysis syndrome.</p> <p>Superior vena cava syndrome.</p>

LEARNING OUTCOMES	PRACTICE COMPETENCIES	LEARNING CONTENT
At the end of this module, cancer nurses will be able to:	At the end of this module, cancer nurses will be able to:	(in alphabetical order)
		Uncontrolled side effects e.g. nausea and vomiting, diarrhoea, mucositis.

## BIBLIOGRAPHY AND RESOURCES

Belum, V.R., Washington, C., Pratilas, C.A., Sibaud, V., Boralevi, F., Lacouture, M.E., 2015. Dermatologic adverse events in pediatric patients receiving targeted anticancer therapies: A pooled analysis. *Pediatr. Blood Cancer*. 62(5): 798-806.

Ben-Arye, E., Samuels, N., Goldstein, L.H., Mutafoğlu, K., Omran, S., Schiff, E., Charalambous, H., Dweikat, T., Ghayeb, I., Bar-Sela, G., Turker, I., Hassan, A., Hassan, E., Saad, B., Nimri, O., Kebudi, R., Silbermann, M., 2016. Potential risks associated with traditional herbal medicine use in cancer care: A study of Middle Eastern oncology health care professionals. *Cancer*. 122(4): 598-610. doi:10.1002/cncr.29796.

Boers-Doets, C.B., Epstein, J.B., 2014. *The Target System: Approach to assessment, grading and management of dermatological and mucosal side-effects of targeted cancer therapy*. Hilversum, IMPAQTT.

Brown, C.G., 2015. *A Guide to oncology symptom management*, second ed. Oncology Nursing Society, Pittsburgh.

Cignola, S., Gonella, S., Alessandra, B., Palese, A., 2016. Monoclonal antibody-induced papulopustular rash: clinical course, communication to health-care professionals and reactive measures as reported by patients. *Eur. J. Oncol. Nurs.* 20: 133-139.

Children's Oncology Group (COG), 2016. COG Supportive care endorsed guidelines. [https://www.childrensoncologygroup.org/downloads/COG\\_SC\\_Guideline\\_Document.pdf](https://www.childrensoncologygroup.org/downloads/COG_SC_Guideline_Document.pdf) Accessed (17 January 2018).

Curigliano, G., Cardinale, D., Dent, S., Criscitiello, C., Aseyev, O., Lenihan, D., Cipolla, C.M., 2016. Cardiotoxicity of anticancer treatments: Epidemiology, detection, and management. *CA Cancer J. Clin.* 66(4): 309-25. doi:10.3322/caac.21341.

Curigliano, G., Cardinale, D., Suter, G., Plataniotis, G., de Azambuja, E., Sandri, M.T., Criscitiello, C., Goldhirsch, A., Cipolla, C., Roila, F. on behalf of the ESMO Guidelines Working Group, 2012. Cardiovascular toxicity induced by chemotherapy, targeted agents and radiotherapy. *Ann. Oncol.* 23(7): 115-166.

Farge, D., Bounameaux, H., Brenner, B., Cajfinger, F., Debourdeau, P., Khorana, A.A., Pabinger, I., Solymoss, S., Douketis, J., Kakkar, A., 2016. International clinical practice guidelines including guidance for direct oral anticoagulants in the treatment and prophylaxis of venous thromboembolism in patients with cancer. *Lancet Oncol.* 17(10): e452-e466.

Fox, P., Darley, A., Furlong, E., Miaskowski, C., Patiraki, E., Armes, J., Ream, E., Papadopoulou, C., McCann, L., Kearney, N., Maguire R., 2017. The assessment and management of chemotherapy-related toxicities in patients with breast cancer, colorectal cancer and Hodgkin's and non-Hodgkin's lymphomas: A scoping review. *Eur. J. Oncol. Nurs.* 26: 63-82.

Friese, C.R., Aiken, L.H., 2008. Failure to Rescue in the Surgical Oncology Population. *Oncol. Nurs. Forum.* 35(5): 779-785.

Friese, C.R., Mendelsohn-Victor, K., Wen, B., Sun, D., Sutcliffe, K., Yang, J.J., Ronis, D.L., McCullagh, M.C., for the DEFENS Study Investigators, 2015. DEFENS – Drug Exposure Feedback and Education for Nurses' Safety: Study protocol for a randomised controlled trial. *Trials*. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC441718/> Accessed (17 January 2018).

Gassmann, C., Kolbe, N., Brenner, A., 2016. Experiences and coping strategies of oncology patients undergoing oral chemotherapy: First steps of a grounded theory study. *Eur. J. Oncol. Nurs.* 23: 106-114.

Griggs, J.J., Mangu, P.B., Anderson, H., Balaban, E.P., Dignam, J.J., Hryniuk, W.M., Morrison, V.A., Pini, T.M., Runowicz, C.D., Rosner, G.L., Shayne, M., Sparreboom, A., Sucheston, L.E., Lyman, G.H., American Society of Clinical Oncology,

2012. Appropriate chemotherapy dosing for obese adult patients with cancer: American Society of Clinical Oncology clinical practice guideline. *J. Clin. Oncol.* 30(13): 1553-61.
- Guleser, G.N., Tasci, S., Kaplan, B., 2012. The experience of symptoms and information needs of cancer patients undergoing radiotherapy. *J. Cancer Educ.* 27(1): 46-53.
- Horneber, M., Bueschel, G., Dennert, G., Less, D., Ritter, E., Zwahlen, M., 2011. How many cancer patients use complementary and alternative medicine: A systematic review and metaanalysis. *Integr. Cancer. Ther.* 11(3): 187-203. doi:10.1177/1534735411423920.
- Johnson, S.B., Park, H.S., Gross, C.P., Yu, J.B., 2017. Use of alternative medicine for cancer and its impact on survival. *J. Natl. Cancer Inst.* 110(1): djx145. <https://doi.org/10.1093/jnci/djx145> Accessed (17 January 2018).
- Lacouture, M.E., Anadkat, M.J., Bensadoun, R.J., Bryce, J., Chan, A., Epstein, J.B., Eaby-Sandy, B., Murphy, B.A., MASCC Skin Toxicity Study Group, 2011. Clinical practice guidelines for the prevention and treatment of EGFR inhibitor-associated dermatologic toxicities. *Support. Care Cancer.* 19(8): 1079-95. doi:10.1007/s00520-011-1197-6.
- 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. *J. Clin. Oncol.* 35(18): 2082-2094. doi:10.1200/JCO.2016.71.7017.
- Mason, H., DeRubeis, M.B., Burke, N., Shannon, M., Karsies, D., Wolf, G., Eisbruch, A., Worden, F., 2016(a). Symptom management during and after treatment with concurrent chemo. Memorial Sloan Kettering Cancer Centre. About herbs, botanicals and other products. <https://www.mskcc.org/cancer-care/diagnosis-treatment/symptom-management/integrative-medicine/herbs> Accessed (17 January 2018).
- Mason, H., DeRubeis, M.B., Burke, N., Shannon, M., Karsies, D., Wolf, G., Eisbruch, A., Worden, F., 2016(b). Symptom management during and after treatment with concurrent chemoradiotherapy for oropharyngeal cancer: A review of the literature and areas for future research. *World J. Clin. Oncol.* 7(2): 220-226.
- Multinational Association for Supportive Care in Cancer (MASCC), 2009. MASCC teaching tool for patients receiving oral agents for cancer. [http://www.mascc.org/assets/Guidelines-Tools/maoat\\_v1.2.pdf](http://www.mascc.org/assets/Guidelines-Tools/maoat_v1.2.pdf) Accessed (17 January 2018).
- Naidoo, J., Panday, H., Jackson, S., Grossman, S.A., 2016. Optimizing the delivery of antineoplastic therapies to the central nervous system. <http://www.cancernetwork.com/oncology-journal/optimizing-delivery-antineoplastic-therapies-central-nervous-system> Accessed (17 January 2018).
- National Cancer Control Programmeme, 2014. Oncology Medication Safety Review Report. <http://www.hse.ie/eng/services/list/5/cancer/profinfo/medonc/safetyreview/oncreview.pdf> Accessed (17 January 2018).
- Neuss, M., Polovich, M., McNiff, K., Esper, P., Gilmore, T.R., LeFebvre, K.B., Schulmeister, L., Jacobson, J.O., 2013. Updated American Society of Clinical Oncology/Oncology Nursing Society chemotherapy administration safety standards including standards for the safe administration and management of oral chemotherapy. *J. Oncol. Pract.* 9(2): 5s-13s.
- Neuss, M.N., Terry, R., Gilmore, R.N., Belderson, K.M., Billett, A.L., Conti-Kalchik, T., Harvey, B.E., Hendricks, C., Lefebvre, K.B., Mangu, P.B., McNiff, K., Olsen, M., Schulmeister, L., Gehr, A.V., Polovich, M., 2017. 2016 Updated American Society of Clinical Oncology/Oncology Nursing Society chemotherapy administration safety standards, including standards for paediatric oncology. *Oncol. Nurs. Forum.* 44(1): 31-43.
- Perez Fidalgo, J.A., Garcia Fabregat, L., Cervantes, A., Marguilies, A., Vidall, C., Roila F., 2012. Management of chemotherapy extravasation: ESMO clinical practice guidelines. *Ann. Oncol.* 23(7): 167-173.
- Schieffer, C.A., Mangu, P.B., Wade, J.C., Camp-Sorrel, D., Cope, D.G., El-Rayes, B.F., Gorman, M., Liguibel, J., Mansfield, P., Levine, M., 2013. Central venous catheter care for the patient with cancer: American Society of Clinical Oncology clinical practice guideline. *J. Clin. Oncol.* 31(10): 1357-1370.
- Schwappach, D.L.B., 2010. Engaging patients as vigilant partners in safety: A systematic review. *Med. Care Res. Rev.* 67(2): 119-148.
- Segal, E.M., Flood, M.R., Mancini, R.S., Whiteman, R.T., Friedt, G.A., Kramer, A.R., Hofstetter, M.A., 2014. Oral chemotherapy food and drug interactions: A comprehensive review of the literature. *J. Oncol. Pract.* 10(4), e255-68.
- Sousa, B., Furlanetto, H., Hutka, M., Gouveia, P., Wuerstein, R., Mariz, J.M., Pinto, D., Cardoso, F. on behalf of ESMO Guidelines Committee, 2015. Central venous access in oncology: ESMO clinical practice guidelines. *Ann. Oncol.* 26(5): 152-168.

Sung, L., Robinson, P., Treister, N., Baggott, T., Gibson, P., Tissing, W., Wiernikowski, J., Brinklow, J., Dupuis, L.L., 2014. Guideline for the prevention of oral and oropharyngeal mucositis in children receiving treatment for cancer or undergoing haematopoietic stem cell transplantation. *BMJ Support. Palliat. Care.* 7:7–16. doi:10.1136/bmjspcare-2014-000804.

UK Oncology Nursing Society (UKONS), 2013. Acute oncology initial management guidelines. [http://www.ukons.org/downloads/FINAL\\_GUIDELINE\\_V\\_1.0\\_11.pdf](http://www.ukons.org/downloads/FINAL_GUIDELINE_V_1.0_11.pdf) Accessed (17 January 2018).

Wilkes, G.M., Barton-Burke, M., 2017. *Oncology nursing drug handbook*. Jones and Bartlett Learning, Burlington, MA.

Wilson, F.I., Mood, D., Nordstrom, C.K., 2010. The influence of easy-to-read pamphlets about self-care management of radiation side effects on patients' knowledge. *Oncol. Nurs. Forum.* 37(6): 774-81.

# Module 4

## Supporting People Living With, Through and Beyond Cancer

**Suggested ECTS credit points: 9**

Contact hours: 90 hours

Study hours with practice: 180 hours

### MODULE OVERVIEW

The overall aim of this module is to equip learners with the knowledge and skills to provide care and support to PABC throughout the cancer trajectory.

Over the last 20 years, enhanced diagnostics and advances in all treatment modalities have improved long-term survival for many patients. Indeed, many types of cancer are now considered a long-term condition. However, extended survival for many people means that they and their families are also more likely to experience, over many years, the longer-term physical and psychosocial effects of cancer and its treatments. Cancer nurses have a pivotal role in the provision of excellent supportive care to PABC covering all phases of disease.

While in this module it is acknowledged that palliative care should begin early in the disease trajectory and be delivered alongside potentially curative treatments, issues related to advanced disease and end of life will be addressed in the next module (Module 5).

LEARNING OUTCOMES	PRACTICE COMPETENCIES	LEARNING CONTENT (in alphabetical order)
<p>At the end of this module, cancer nurses will be able to:</p> <p>1. Identify the impact of cancer on the physical, psychological, emotional, social and spiritual wellbeing of people affected by cancer (PABC).</p>	<p>Use evidence-based interventions to assess, prevent and, manage the physical, psychological, social and existential consequences of cancer.</p> <p>Develop an individualized care plan in collaboration with PABC tailored to the phase of disease (e.g. diagnosis, during treatment post-treatment, i.e. survivorship and rehabilitation).</p> <p>Involve specialist palliative support care services where appropriate (linked to Module 5).</p> <p>Know when to refer to and involve members of the multi-professional team to deliver holistic, patient-centred care.</p>	<p>Addressing fear of recurrence.</p> <p>Emotional distress.</p> <p>Emotional resilience.</p> <p>Evidence-based symptom management, pharmacological and non-pharmacological.</p> <p>Financial impact of cancer.</p> <p>Healthy diet.</p> <p>Impact of cancer across the life span: from infancy to older age.</p> <p>Impact of cancer on body image, fertility and sexuality.</p> <p>Impact of cancer on vulnerable and disadvantaged groups.</p>
<p>2. Describe the complex and changing informational, educational and supportive care needs of PABC.</p>	<p>Identify and utilise appropriate informational, educational and supportive care interventions aligned to PABCs' needs and life-stage at different phases of the disease.</p> <p>Demonstrate awareness of the range of services and professionals, including statutory, voluntary and charitable organisations, available to support PABC and refer appropriately to meet the individual needs of PABC.</p>	<p>Nutritional support.</p> <p>Philosophy of palliative care.</p> <p>Poly-pharmacy, concordance and adherence in long-term cancer management.</p> <p>Psychological care and support.</p> <p>Psycho-social adjustment to cancer.</p> <p>Spirituality and existential distress.</p> <p>Supportive care interventions.</p> <p>Symptom burden.</p> <p>Symptom clusters.</p> <p>The age-specific needs of teenagers and young adults.</p> <p>The age-specific needs of specific groups such older adults.</p> <p>The shifting perspectives model of survivorship in cancer.</p>
<p>3. Describe theories of self-management and self-</p>	<p>Provide information to PABC to promote and support self-care</p>	<p>Managing fatigue.</p>

LEARNING OUTCOMES	PRACTICE COMPETENCIES	LEARNING CONTENT (in alphabetical order)
<p>empowerment as well as lifestyle interventions for improving quality of life.</p>	<p>and self-management and enable independence.</p> <p>Consider the needs of younger and older patients who may not have independence to make decisions for themselves.</p> <p>Signpost PABC to other sources of support.</p>	<p>Motivational interviewing.</p> <p>Peer support.</p> <p>Role of exercise.</p> <p>Smoking cessation.</p> <p>Support needs of families/carers.</p> <p>Theories of coping.</p> <p>Theories of self-management and self-care.</p> <p>Transition from paediatric to adult services for teenagers and young adults.</p>
<p>4. Examine the potential impact of co-morbidities and the consequences of long-term and late effects of cancer treatment.</p>	<p>Identify individuals who are at high risk of long-term and late effects, including risk of secondary cancer.</p> <p>Appropriately consider co-morbidity, the impact of long-term illness and survivorship on the health status and well-being of PABC and implement appropriate referrals to other professionals and agencies in respect of these.</p> <p>Deliver supportive care to manage cancer co-morbidities and other diseases (e.g. COPD, Diabetes).</p>	<p>Co-morbidity and other disease states in cancer care.</p> <p>End of treatment summaries.</p> <p>Frailty in older adults.</p> <p>Impact on fertility and sexuality.</p> <p>Psychological long-term effects e.g. depression, anxiety, fear of recurrence, post-traumatic stress disorder etc.</p> <p>Physical long-term effects of treatment e.g. osteoporosis, lymphoedema, fatigue, secondary cancers, cardiac failure, growth disruption etc.</p> <p>Rehabilitation.</p> <p>Risk assessment of late effects.</p> <p>Social impact e.g. on education and career, relationships etc.</p>
<p>5. Recognise the importance of smooth transitions such as between acute healthcare settings and home care, from active treatment to survival programmes, or from paediatric to adult cancer services.</p>	<p>Act to support effective continuity of care and seamless transitions between different healthcare services, from active treatment through to survivorship (long-term follow-up) and/or palliative and EOLC.</p>	<p>Discharge planning.</p> <p>Liaison with other services.</p> <p>Role of different health and social care agencies in supportive cancer care.</p> <p>Transition of care from child to adult services.</p>

LEARNING OUTCOMES	PRACTICE COMPETENCIES	LEARNING CONTENT
At the end of this module, cancer nurses will be able to:	At the end of this module, cancer nurses will be able to:	(in alphabetical order)
6. Demonstrate insight into the emotional labour involved when caring for PABC throughout the spectrum of cancer care and evaluate reasons why care of the self and colleagues is important.	Seek emotional and developmental support when required. Actively support colleagues. Act as a role model.	Caring for self. Emotional intelligence. Emotional resilience. Support for colleagues.

## BIBLIOGRAPHY AND RESOURCES

Adams, E., Boulton, M., Watson, E., 2009. The information needs of partners and family members of cancer patients: A systematic review. *Patient Educ. Couns.* 77(2): 179-186.

American Society for Clinical Oncology (ASCO), 2012. Tobacco cessation guide for oncology providers. <https://www.asco.org/sites/new-www.asco.org/files/content-files/blog-release/documents/tobacco-cessation-guide.pdf> Accessed (17 January 2018).

Campbell, A., Foster, J., Stevenson, C., 2012. The importance of physical activity for people living with and beyond cancer: A concise evidence review. [https://www.macmillan.org.uk/\\_images/the-importance-physical-activity-for-people-living-with-and-beyond-cancer\\_tcm9-290123.pdf](https://www.macmillan.org.uk/_images/the-importance-physical-activity-for-people-living-with-and-beyond-cancer_tcm9-290123.pdf) Accessed (17 January 2018).

Chambers, S.K., Girgis, A., Occhipinti, S., Turner, J., Hutchison, S., Morris, B., Dunn, J., 2012. Psychological distress and unmet supportive care needs in cancer patients and carers who contact cancer helplines. *Eur. J. Cancer Care.* 21: 213-223.

Children's Oncology Group (COG), 2013. COG Supportive care endorsed guidelines. Long-term follow-up guidelines for survivors of childhood, adolescent, and young adult cancers, version 4. [http://www.survivorshipguidelines.org/pdf/LTFUGuidelines\\_40.pdf](http://www.survivorshipguidelines.org/pdf/LTFUGuidelines_40.pdf) Accessed (17 January 2018).

Duijts, S.F., van Egmond, M.P., Spelten, E., van Muijen, P., Anema, J.R., van der Beek, A.J., 2014. Physical and psychosocial problems in cancer survivors beyond return to work: A systematic review. *Psychooncology.* 23(5): 481-92.

Ellington, L., Billitteri, J., Reblin, M., Clayton, M.F., 2017. Spiritual care communication in cancer patients. *Semin. Oncol. Nurs.* 33(5): 517-525.

Foster, C., Scott, I., Addington-Hall, J., 2010. Who visits mobile UK services providing cancer information and support in the community? *Eur. J. Cancer Care.* 19: 221-226.

Greenlee, H., DuPont-Reyes, M.J., Balneaves, L.G., Carlson, L.E., Cohen, M.R., Deng, G., Johnson, J.A., Mumber, M., Seely, D., Zick, S.M., Boyce, L.M., Tripathy, D., 2017. Clinical practice guidelines on the evidence-based use of integrative therapies during and after breast cancer treatment. *CA Cancer J. Clin.* 67(3): 194-232.

Harrison, J.D., Young, J.M., Price, M.A., Butow, P.N., Solomon, M.J., 2009. What are the unmet supportive care needs of people with cancer? A systematic review. *Support. Care Cancer.* 17(8): 1117-11128.

Hudson, M.M., Ness, K.K., Gurney, J.G., Mulrooney, D.A., Chemaitilly, W., Krull, K.R., Green, D.M., Armstrong, G.T., Nottage, K.A., Jones, K.E., Sklar, C.A., Srivastava, D.K., Robison, L.L., 2013. Clinical ascertainment of health outcomes among adults treated for childhood cancer. *JAMA.* 309(22): 2371-2381.

Husson, O., Mols, F., van de Poll-Franse, L.V., 2011. The relationship between information provision and health-related quality of life, anxiety and depression among cancer survivors: A systematic review. *Ann. Oncol.* 22(4): 761-772.

Keegan, T.H., Lichtensztain, D.Y., Kato, I., Kent, E.E., Wu, X.C., West, M.M., Hamilton, A.S., Zebrack, B., Bellezzi, K.M., Smith, A.W., 2012. Unmet adolescent and young adult cancer survivors information and service needs: A population-based cancer registry study. *J. Cancer Surviv.* 6(3): 239-250.

- Lagerlund, M., Sharp, L., Lindqvist, R., Runesdotter, S., Tishelman, C., 2015. Intention to leave the workplace among nurses working with cancer patients in acute care hospitals in Sweden. *Eur. J. Oncol. Nurs.* 19(2): 142-147.
- Lambert, S.D., Harrison, J.D., Smith, E., Bonevski, B., Carey, M., Lawsin, C., Paul, C., Girgis A., 2012. The unmet needs of partners and caregivers of adults diagnosed with cancer: A systematic review. *BMJ Support. Palliat. Care.* 2(3): 224-30.
- Lee, M.Y., Mu, P.F., Tsay, S.F., Chou, S.S., Chen, Y.C., Wong, T.T., 2012. Body image of children and adolescents with cancer: A metasynthesis on qualitative research findings. *Nurs. Health Sci.* 14(3): 381-90.
- McCarthy, B., 2010. Family members of patients with cancer: what they know, how they know and what they want to know. *Eur. J. Oncol. Nurs.* 15(5): 428-441.
- McCockle, R., Ercolano, E., Lazenby, M., Schulman-Green, D., Schilling, L.S., Lorig, K., Wagner, E.H., 2011. Self-management: Enabling and empowering patients living with cancer as a chronic illness. *CA Cancer J Clin.* 61(1): 50-62. doi: 10.3322/caac.20093.
- Merenda, C., 2011. Exploring the role of oncology nurse navigators. *ONS Connect.* 26(10): 8-12.
- Puts, M.T., Papoutsis, A., Springall, E., Tourangeau, A.E., 2011. A systematic review of unmet needs of newly diagnosed older cancer patients undergoing active cancer treatment. *J. Adv. Nurs.* 67(11): 2363-2372.
- Rock, C.L., Doyle, C., Demark-Wahnefried, W., Meyerhardt, J., Courneya, K.S., Schwartz, A.L., Bandera, E.V., Hamilton, K.K., Grant, B., McCullough, M., Byers, T., Gansler T., 2012. Nutrition and physical activity guidelines for cancer survivors. *CA Cancer J. Clin.* 62(4): 243-274.
- Ruiz, M., Reske, T., Cefalu, C., Estrada, J., 2013. Management of elderly and frail elderly cancer patients: The importance of comprehensive geriatric assessment and the need for guidelines. *Am. J. Med. Sci.* 346(1): 66-69.
- Rutten, L.J., Arora, N.K., Bakos, A.D., Aziz, N., Rowland, J., 2005. Information Needs and Sources of Information among Cancer Patients: A Systematic Review of Research (1980–2003). *Patient Educ. Couns.* 57(3): 250-261.
- Smith, S., Mooney, S., Cable, M., Taylor, R.M., 2016. A blueprint of care for teenagers and young adults with cancer, second ed. Teenage Cancer Trust, London.
- Society for Integrative Oncology (SIO). Integrative Oncology Guidelines. <https://integrativeonc.org/integrative-oncology-guidelines> Accessed (17 January 2018).
- Ullgren, H., Kirpatrick, L., Kilpelainen, S., Sharp, L., 2017. Working in silos? Head and neck cancer patients during and after treatment with or without early palliative care referral. *Eur. J. Oncol. Nurs.* 26: 56-62.
- Vallet-Regí, M., Manzano, M., Rodriguez-Mañas, L., Checa López, M., Aapro, M., Balducci L., 2017. Management of cancer in the older age person: An approach to complex medical decisions. *Oncologist.* 22(3): 335-342.
- Wakefield, C.E., Butow, P., Fleming, C.A., Daniel, G., Cohn, R.J., 2012. Family information needs at childhood cancer treatment completion. *Paediatr. Blood Cancer.* 58(4): 621-626.
- Wanat, M., Boulton, M., Watson, E., 2016. Patients' experience with cancer recurrence: A meta-ethnography. *Psychooncology.* 25(3): 242-52.
- Zebrack, B.J., Block, R., Hayes-Lattin, B., Embry, L., Aguilar, C., Meeske, K.A., Li, Y., Butler, M., Cole, S., 2013. Psychosocial service use and unmet need among recently diagnosed adolescent and young adult cancer patients. *Cancer.* 119(1): 201-214.

# Module 5

## Supporting People with Advanced Disease and at End of Life

**Suggested ECTS credit points: 6**

Contact hours: 60 hours

Study hours with practice: 120 hours



### **MODULE OVERVIEW**

The overall aim of this module is to help learners develop their knowledge and skills to deliver a high standard of palliative and supportive care to those who are living with advanced disease including at end of life.

People living with advanced disease can experience multiple and complex physical, practical, psychosocial, emotional and spiritual needs. Cancer nurses have a pivotal role in not only ensuring that people live well until they die but also in providing the conditions for experiencing a dignified death in accordance with their wishes.

As specified by the World Health Organisation, palliative care should be introduced to PABC early in the disease trajectory (not just at end of life) and delivered alongside treatments which aim to prolong life, such as chemotherapy and radiotherapy (WHO, 2002). However, it is recognised that within cancer healthcare services, where care may be focused on a curative approach, there are challenges and barriers to incorporating a palliative care approach. Therefore, this module should aim to offer the learner practical strategies on how to apply and integrate the palliative approach when they care for PABC.

LEARNING OUTCOMES	PRACTICE COMPETENCIES	LEARNING CONTENT (in alphabetical order)
<p>At the end of this module cancer nurses will be able to:</p> <p>1. Explain how the philosophy and principles of palliative care and end of life care are implemented in their own care setting, e.g. supportive care, palliative care and end-of-life care.</p>	<p>At the end of this module cancer nurses will be able to:</p> <p>Recognise that palliative care is the responsibility of all cancer care professionals regardless of healthcare setting.</p> <p>Identify the barriers to integrating palliative care and act to address them.</p> <p>Inform, support and educate PABC about palliative and end-of-life care where appropriate.</p> <p>Demonstrate an open attitude towards and act as an advocate for palliative care.</p> <p>Raise awareness and educate colleagues about palliative care.</p>	<p>Barriers to palliative care.</p> <p>Historical journey of palliative and end-of-life care.</p> <p>Impact on survival.</p> <p>Interface between active cancer treatment and palliative care.</p>
<p>2. Describe the important role of palliative care throughout the disease trajectory.</p>	<p>Recognise the importance of effective continuity of care and seamless transitions between different healthcare services, from active treatment through to end of life.</p> <p>Facilitate appropriate discussions between health and social care professionals, patients and their family members to elicit their preferences with respect to goals of care and the transition between care aimed at cure and end-of-life care.</p>	<p>Advance care planning.</p> <p>Advanced disease symptom management e.g. breathlessness, pain, nausea and vomiting etc.</p> <p>Case management in advanced disease and EOL.</p> <p>Communication skills used for challenging conversations.</p> <p>Holistic Needs Assessment.</p> <p>Transitional palliative care.</p>
<p>3. Identify the physical, psychological, social, emotional and existential impact of advanced disease.</p>	<p>Undertake a holistic assessment of the needs, concerns and symptoms commonly experienced by PABC receiving palliative and/or end-of-life care.</p> <p>Identify and deliver evidence-informed nursing interventions to support patients and carers.</p> <p>Recognise and support vulnerable patients e.g. the elderly, cognitively impaired.</p>	

LEARNING OUTCOMES At the end of this module cancer nurses will be able to:	PRACTICE COMPETENCIES At the end of this module cancer nurses will be able to:	LEARNING CONTENT (in alphabetical order)
4. Describe the signs of dying and distinguish between reversible treatable symptoms and those which indicate the final phase of life.	Recognize the final phase of life.  Communicate sensitively, truthfully and without ambiguity about the dying process with PABC.  Deliver appropriate interventions to guide and support PABC and their carers through the dying process.  Involve and know when to refer on to other healthcare providers.	The biology of dying (recognising the dying process and biological criteria for defining death at the end of the dying process).  Communication skills for EOLC.  Decision making at EOL.  The key symptoms of dying, e.g. agitation, dry mouth, and their management.
5. Define the goals of care when a person is dying e.g. patient comfort and dignity, symptom management, family and caregiver support.	Provide appropriate nursing interventions to promote patient comfort and dignity.  Respect and respond to different cultural and religious perspectives/needs at EOL.  Identify the need and implement strategies for involving and supporting the family and carers.	Comfort measures e.g. mouth care, privacy.  Cultural/religious approaches to death and dying.  Last offices.  Legal and ethical issues involved in EOL care.  Spiritual care.  Symptom management.
6. Explore theories of loss, grief and bereavement and how these are applied in clinical practice.	Use active listening and observation skills to recognise, assess and appropriately support a person experiencing distress.  Know when to refer and involve other healthcare providers.  Support and give advice to families and carers following death.	Family support and bereavement counselling.  Sustaining hope.  Theories of loss and grief.

## BIBLIOGRAPHY AND RESOURCES

Adams, J.A., Bailey, D.E., Anderson, R.A., Docherty, S.L., 2011. Nursing roles and strategies in end-of-life decision making in acute care: A systematic review of the literature. *Nurs. Res. Pract.* Vol 2011: 1-15.

Block van den, L., Pivodic, L., Pardon, K., Donker, G., Miccinesi, G., Moreels, S., Alonso, T.V., Deliens L., Onwuteaka-Philipsen, B., 2015. Transitions between health care settings in the final three months of life. *Eur. J. Pub. Health.* 25(4): 569-575.

Brinkman-Stoppelenburg, A., Rietjens, J.A.C., van der Heide, A., 2014. The effects of advance care planning on end-of-life care: A systematic review. *Palliat. Med.* 28(8): 1000-1025.

- Cannaerts, N., Dierckx de Casterle, B., Grypdonck, M., 2004. Palliative care, care for life: A study of the specificity of residential palliative care. *Qual. Health Res.* 14(6): 816-835.
- De Graaf, E., van Klinken, M., Zweers, D., Teunissen, S., 2016. From concept to practice, is multidimensional care the leading principle in hospice care? An exploratory mixed method study. *BMJ Support. Palliat. Care.* <http://spcare.bmj.com/content/early/2017/02/06/bmjspcare-2016-001200.long> Accessed (17 January 2018).
- De Souza, J., Pettifer, A., 2013. *End of life care – A guide to nursing practice.* Sage, London.
- Dobrina, R., Tenze, M., Palese, A., 2014. An overview of hospice and palliative care nursing models and theories. *Int. J. Palliat. Nurs.* 20(2): 75-81.
- Dougherty, L., Lister, S., West-Oram, A. (Eds.), 2015. *End of life care*, in: *The Royal Marsden manual of clinical nursing procedures*, ninth ed. Wiley-Blackwell, Chichester.
- Edmonds, P., Burman, R., Prentice, W., 2009. End of life care in the acute hospital setting. *BMJ.* 339, b5048.
- Georges, J.J., Grypdonck, M., Dierckx De Casterle, B., 2002. Being a palliative care nurse in an academic hospital: A qualitative study about nurses' perceptions of palliative care nursing. *J. Clin. Nurs.* 11(6): 785-793.
- Gomes, B., Cohen, J., Deliens, L., Higginson, I., 2011. International trends in circumstances of death and dying amongst older people, in: Gott, M., Ingleton, C. (Eds.), *Living with ageing and dying.* Oxford University Press, Oxford.
- Gysels, M., Evans, N., Menaca, A., Andre, E., Toscan, F., Finetti, S., Pasman, R.H., Higginson, I., Harding, R., Pool, R. on behalf of project PRISMA, 2012. Culture and end of life care: A scoping exercise in seven European countries. *Plos ONE* 7 (4).
- Hawley, P.H., 2014. The bow tie model of 21st century palliative care. *J. Pain Symptom Manage.* 47(1): e5.
- Hui, D., Bruera, E., 2016. Integrating palliative care into the trajectory of cancer care. *Nat. Rev. Clin. Oncol.* 13(3): 159–171.
- Johnstone, M.J., Hutchinson, A.M., Redley, B., Rawson, H., 2015. Nursing roles and strategies in end-of-life decision making concerning elderly immigrants admitted to acute care hospitals. *J. Transcult. Nurs.* 27(5): 471-479.
- McIlfratrick, S., 2006. Assessing palliative care needs: Views of patients, informal carers and healthcare professionals. *J. Adv. Nurs.* 57(1): 77-86.
- Mulvihill, K., 2016. Integrating palliative care into outpatient oncology: A case study. *Am. J. Manag. Care.* 22 (16).
- Nappa, U., Rasmussen, B.H., Axelsson, B., Lindqvist, O., 2014. Challenging situations when administering palliative chemotherapy – A nursing perspective. *Eur. J. Oncol. Nurs.* 18: 591-597.
- National Institute of Healthcare Excellence (NICE), 2015. *Care of dying adults in the last days of life.* <https://www.nice.org.uk/guidance/ng31> Accessed (17 January 2018).
- Renzenbrink, I. (Ed.), 2011. *Caregiver stress and staff support in illness, dying and bereavement.* Oxford University Press, Oxford.
- Temel, J.S., Greer, J.A., Muzikansky, A., Gallagher, E.R., Admane, S., Jackson, V.A., Dahlin, C.M., Blinderman, C.D., Jacobsen, J., Pirl, W.F., Billings, J.A., Lynch, T.J., 2010. Early palliative care for patients with metastatic non-small-cell lung cancer. *N. Engl. J. Med.* 363(8): 733-42.
- Teunissen, S., Wesker, W., Kruitwagen, C., de Haes, H., Voest, E.E., de Graeff, A., 2007. Symptom prevalence in patients with incurable cancer: A systematic review. *J. Pain Symptom Manage.* 34 (1): 94-104.
- Weathers, E., O’Caoith, R., Cornally, N., Fitzgerald, C., Kearns, T., Coffey, A., Daly, E., O’Sullivan, R., McGlade, C., Molloy, D.W., 2016. Advance care planning: a systematic review of randomised controlled trials conducted with older adults. *Maturitas.* 91: 101-109.
- WHO, 2002. *Definition of palliative care.* World Health Organisation, Geneva. <http://www.who.int/cancer/palliative/definition/en/> Accessed (17 January 2018).
- Wiencek, C., Coyne, P., 2014. Palliative care delivery models. *Semin. Oncol. Nurs.* 30(4): 227-233.
- Zimmerman, C., Swami, N., Kryzanowska, M., Hannon, B., Leighl, N., Lo, C., 2012. Early palliative care for patients with advanced cancer: A cluster randomised controlled trial. *Lancet.* 383: 1721-30.

# Module 6

## Communication in Cancer Care



**Suggested ECTS credit points: 6**

Contact hours: 60 hours

Study hours with practice: 120 hours

### **MODULE OVERVIEW**

The overall aim of this module is to help learners to develop the knowledge and skills required for effective communication with PABC throughout the spectrum of cancer care.

Effective person-centered communication is consistently identified as being a key factor in determining patients' and carers' needs, concerns and preferences but also patients' satisfaction, adherence to treatment, recommended behaviour change, safety, improved outcomes and recovery.

Nurses working in cancer care settings can be exposed to very difficult and distressing situations, some of which can be extremely challenging. Insufficient educational preparation and training in communication has been found to be a major factor contributing to stress, lack of job satisfaction and emotional burnout in healthcare professionals.

LEARNING OUTCOMES	PRACTICE COMPETENCIES	LEARNING CONTENT (in alphabetical order)
<p>At the end of this module, cancer nurses will be able to:</p> <p>1. Discuss the importance of effective person-centered care communication in the clinical setting in general and in the cancer setting in particular.</p>	<p>At the end of this module, cancer nurses will be able to:</p> <p>Effectively utilise verbal, written and digital modes of communication to provide information, education and support in an emphatic, clear, understandable and caring manner while maintaining confidentiality.</p>	<p>Barriers to effective communication: e.g. age, language, sensory impairments, communication impairments, low literacy, poor health literacy, certain medical conditions, anxiety, physical discomfort, heavy workload, time pressure, inadequate staffing, unsuitable environment/ distractions, breaking bad news strategies e.g. SPIKES</p>
<p>2. Demonstrate knowledge of communication theories and how they are applied in practice, including strategies for conducting assessments.</p>	<p>Select and adopt an appropriate communication approach, from a range of core communication and consultation skills, to effectively assess the informational, educational and supportive care needs of PABC throughout the cancer trajectory.</p>	<p>Communication goals and needs of PABC.</p> <p>Confidentiality and data protection.</p>
<p>3. Describe the barriers to and facilitators of effective communication when interacting with PABC.</p>	<p>Assess for and address any patient-related, nurse-related or environmental barriers to effective communication.</p>	<p>Consideration of challenges related to use of untrained/unqualified translators. Core communication skills, e.g. active listening, identifying cues and exploring concerns, paraphrasing, reflection, silence, non-verbal communication.</p> <p>Evidence-based patient information and education materials which are clearly written, literacy friendly</p> <p>Facilitators of effective communication: use of core communication skills, caring attitude, privacy, quiet spaces, designated time, use of appropriate translators, sensory aids.</p> <p>Impact of nurse-patient communication on health outcomes (e.g. adherence to treatment) and on patient experience.</p> <p>Impact of nurse-patient communication on patient and health professional satisfaction.</p> <p>Individualised, achievable person-centered goals, plan of</p>

LEARNING OUTCOMES	PRACTICE COMPETENCIES	LEARNING CONTENT (in alphabetical order)
At the end of this module, cancer nurses will be able to:	At the end of this module, cancer nurses will be able to:	<p>care/action plan with timely review periods.</p> <p>Needs assessment tools.</p> <p>Patient/person-centered communication.</p> <p>Person-centered care.</p> <p>Shared decision-making.</p>
4. Explore the importance of multi-professional communication in cancer care and how this can be enhanced.	Appropriately select from a range of communication skills and styles available in order to promote clear and unambiguous information exchanges with other health professionals.	<p>Communication tools, e.g. SBAR, SAGE &amp; THYME, closed loop communication, briefing, debriefing, etc.</p> <p>Confidentiality and data protection.</p> <p>Effective team work.</p> <p>Evidence-based patient information material.</p> <p>Managing professional boundaries in face-to-face and digital communication.</p> <p>Methods and principles for effective professional communication.</p> <p>Principles and methods for effective clinical information exchange with focus on safe handovers and care transitions.</p> <p>Verbal, non-verbal and written communication.</p>
5. Identify supportive strategies which will help cancer nurses to develop emotional resilience.	<p>Demonstrate emotional literacy, reflective ability, appropriate empathy and social competence.</p> <p>Act as a role model for others.</p> <p>Recognise own emotional needs and act accordingly using help seeking behaviour to prevent burnout.</p>	<p>Compassion fatigue, burnout and its impact on communication.</p> <p>Emotional resilience, reflective ability, emotional intelligence.</p> <p>Social confidence, social support, reflective practice, supervision, peer coaching, mindfulness, experiential learning.</p>

## BIBLIOGRAPHY AND RESOURCES

- Baile, W.F., Buckman, R., Lenzi, R., Glober, G., Beale, E.A., Kudelka, A.P., 2000. SPIKES-A six-step protocol for delivering bad news: Application to the patient with cancer. *Oncologist*. 5(4): 302-11.
- BC Safety and Quality Council, 2013. Culture change toolbox. <https://bcpsqc.ca/blog/knowledge/culture-change-toolbox> Accessed (17 January 2018).
- Cohen-Fineberg, I., Kawashima, M., Asch, S.M., 2011. Communication with families facing life-threatening illness: A research-based model for family conferences. *Palliat. Med.* 14(4): 421-427.
- Connolly, M., Perryman, J., McKenna, Y., Orford, J., Thomson, L., Shuttleworth, J., Cocksedge, S., 2009. SAGE & THYME: A model for training health and social care professionals in patient-focused support. *Patient Educ. Couns.* 79(1): 87-93.
- Cossette, S., Cara, C., Ricard, N., Pepin, J., 2005. Assessing nurse-patient interactions from a caring perspective: Report of the development and preliminary psychometric testing of the caring nurse-patient interactions scale. *Int. J. Nurs. Stud.* 42(6): 673-86.
- Doyle, C., Lennox, L., Bell, D., 2013. A systematic review of evidence on the links between patient experience and clinical safety and effectiveness. *BMJ Open*. 3:e001570.
- Fallowfield, L., Jenkins, V., 1999. Effective communication skills are the key to good cancer care. *Eur. J. Cancer*. 152: 1423-1433.
- Frenkel, M., Cohen, L., 2014. Effective communication about the use of complementary and integrative medicine in cancer care. *J. Altern. Complement. Med.* 20(1): 12-18.
- Grant, G., Kinman, G., 2014. Emotional resilience in the helping professions and how it can be enhanced. *Health and Social Care Education*. 3(1): 23-34.
- Kissane, D., Bultz, B., Butow, P., Finlay, L., 2011. *Handbook of communication in oncology and palliative care*. Oxford University Press, Oxford.
- Kullberg, A., Sharp, L., Johansson, H., Bergenmar, M., 2015. Information exchange in oncological inpatient care – patient satisfaction, participation and safety. *Eur. J. Oncol. Nurs.* 19(2): 142-7.
- London F., 2009. *No time to teach: The essence of patient and family education for healthcare providers*, second ed. Pritchett and Hull Associates, Incorporated. Atlanta, GA.
- Mazor, K.M., Street, R.L., Sue, V.M., Williams, A.E., Babin, B.A., Arora, N.K., 2016. Assessing patients' experiences with communication across the cancer care continuum. *Patient Educ. Couns.* 99: 1343-1348.
- Moore, P.M., Rivera Mercado, S., Grez Artigues, M., Lawrie, T.A., 2013. Communication skills training for healthcare professionals working with people who have cancer. *Cochrane Database Syst. Rev.* 28(3): CD003751 doi:10.1002/14651858.CD003751.pub3.
- National Institute for Clinical Excellence (NICE), 2004. *Guidance on cancer services: Improving supportive and palliative care for adults*. NICE, London.
- Newman, A.R., 2016. Nurses' perceptions of diagnosis and prognosis-related communication: An integrative review. *Cancer Nurs.* 39(5): E48-60.
- Norouzinia, R., Aghabarari, M., Shiri, M., Karimi, M., Samami, E., 2016. Communication barriers perceived by nurses and patients. *Glob. J. Health Sci.* 8(6): 65–74.
- O'Daniel, M., Rosenstein, A.H., 2008. Professional communication and team collaboration, in: Hughes, R.G. (Ed.), *Patient safety and quality: An evidence-based handbook for nurses*. Agency for Healthcare Research and Quality. Rockville, MD.
- Oguchi, M.I., Jansen, J., Butow, P., Colagiuri, B., Divine, R., Dhillon, H., 2011. Measuring the impact of nurse cue-response behaviour on cancer patients' emotional cues. *Patient Educ. Couns.* 82 (2): 163-168.
- Pehrson C., Banerjee, S.C., Manna, R., Shen, M.J., Hammonds, S., Coyle, N., Krueger, C.A., Maloney, E., Zaidler, T., Bylund, C.L., 2016. Responding empathically to patients: development, implementation, and evaluation of a communication skills training module for oncology nurses. *Patient Educ. Couns.* 99(4): 610-616.

- Rutten, L.J., Arora, N.K., Bakos, A.D., Aziz, N., Rowland, J., 2005. Information needs and sources of information among cancer patients: A systematic review of research (1980–2003). *Patient Educ. Couns.* 57(3): 250-261.
- Shaw, J., Young, J., Butow, P., Chambers, S., O'Brien, L., Solomon, M., 2013. Delivery of telephone-based supportive care to people with cancer: An analysis of cancer helpline operator and cancer nurse communication. *Patient Educ. Couns.* 93: 444-450.
- Street, R.L., Makoul, G., Arora, N.K., Epstein, R.M., 2009. How does communication heal? Pathways linking clinician-patient communication to health outcomes. *Patient Educ. Couns.* 74(3): 295-301.
- Tay, L.H., Hegney, D., Ang, E., 2011. Factors affecting effective communication between registered nurses and adult cancer patients in an inpatient setting: A systematic review. *Int. J. Evid. Based Healthc.* 9(2): 151-64.
- The Joint Commission, 2010. Advancing effective communication, cultural competence, and patient- and family-centred care: A roadmap for hospitals. Oakbrook Terrace, IL.  
<http://www.jointcommission.org/assets/1/6/roadmapforhospitalsfinalversion727.pdf> Accessed (17 January 2018).
- Thorne, S., Hislop, T.G., Kim-Sing, C., Oglov, V., Oliffe, J.L., Stajduhar, K.I., 2014. Changing communication needs and preferences across the cancer care trajectory: Insights from the patient perspective. *Support. Care Cancer.* 22: 1009-1015.
- Thorne, S., Oliffe, J.L., Stajduhar, K.I., Oglov, V., Kim-Sing, C., Hislop, T.G., 2013. Poor communication in cancer and cancer care: Patient perspectives on what it is and what to do about it. *Cancer Nurs.* 36(6): 445-453.
- Turrentine, F.E., Rose, K.M., Hanks, J.B., Lorntz, B., Owen, J.A., Brashers, V.L., Ramsdale, E.E., 2016. Interprofessional training enhances collaboration between nursing and medical students: A pilot study. *Nurse Educ. Today.* 40: 33-38.
- Watson, J., Hadjiconstantinou, M., Hubbard, G., Hobbs, N., Forbat, L., 2010. Evaluation of the Macmillan Cancer information and support service in West Lothian. University of Stirling, Scotland.
- Wittenberg-Lyles, E., Goldsmith, J., Ferrell, B., 2013. Oncology nurse communication barriers to patient-centred care. *Clin. J. Oncol. Nurs.* 17(2): 152-158.

# Module 7

## Leadership and Management in Cancer Nursing

**Suggested ECTS credit points: 6**

Contact hours: 60 hours

Study hours with practice: 120 hours



### **MODULE OVERVIEW**

The overall aim of this module is to equip learners with the leadership skills to facilitate team management and to organise work and practice development within a cancer setting.

Regardless of role or position, all cancer nurses are expected to provide leadership. Multi-professional team working is vital in cancer care. Therefore, cancer nurses need to develop skills in interpersonal relationships, communication and workforce development.

LEARNING OUTCOMES	PRACTICE COMPETENCIES	LEARNING CONTENT (in alphabetical order)
<p>At the end of this module, cancer nurses will be able to:</p> <p>1. Differentiate between leadership and management and consider how different models of clinical leadership may impact on the care provided to PABC.</p>	<p>At the end of this module, cancer nurses will be able to:</p> <p>Use appropriate leadership and management strategies to practice and evaluate the impact of these strategies upon PABC and on other healthcare professionals.</p>	<p>Challenges of clinical leadership – balance between support and challenge.</p> <p>Change management.</p> <p>Delegation and communication.</p> <p>Development of nursing roles.</p> <p>Differences between leadership and management.</p> <p>Importance of the role of modelling.</p> <p>Leadership skills for collaborative and effective teamwork.</p> <p>Models and theories of management and leadership.</p> <p>Political and emotional intelligence, self-awareness, social skills, social awareness, self-management.</p> <p>Theories of leadership.</p> <p>What makes a good leader.</p>
<p>2. Describe the importance of the legal, ethical and professional issues in relation to the care of PABC.</p>	<p>Practice in accordance with legal, ethical and professional principles in order to provide safe, effective, timely, cost-effective care to PABC.</p> <p>Practice in accordance with national and local policies and standards in order to provide safe, effective, timely, cost-effective care to PABC.</p> <p>Provide leadership in the contribution to and implementation and evaluation of policies and standards relevant to cancer care.</p>	<p>Caring, therapeutic, interpersonal relationships.</p> <p>Clinical audit and standards for practice, quality improvement data.</p> <p>Core communication skills.</p> <p>Good governance with clear structures and accountability.</p> <p>Importance of adherence to relevant legislation, policies, protocols, guidelines.</p> <p>Importance of nursing input at a strategic level and in local and national policy development.</p> <p>Membership and leadership of multi-professional teams.</p>
<p>3. Describe the principles of risk assessment and management</p>	<p>Assess risk and implement appropriate risk management strategies in order to promote</p>	<p>Quality improvement strategies.</p>

	LEARNING OUTCOMES	PRACTICE COMPETENCIES	LEARNING CONTENT
	At the end of this module, cancer nurses will be able to:	At the end of this module, cancer nurses will be able to:	(in alphabetical order)
	in relation to the care of PABC.	patient well-being and safety in practice.	Risk assessment and safety.
4.	Discuss the importance of self-development and emotional resilience for cancer nurses.	Demonstrate evidence of continuing professional development and actively promote the professional development of nurses working in other areas of the organization.	Continuing professional development for cancer nurses and healthcare assistants. Foster a mentoring culture. Lifelong learning. National and international networking. Postgraduate education for nurses. Supporting staff and creating opportunities to develop emotional resilience. Training in leadership and management.
5.	Discuss the importance of relevant resource management strategies in relation to cancer care.	Demonstrate the ability to plan, allocate, coordinate and evaluate the use of healthcare resources in an appropriate manner when providing care to PABC.	Financing of healthcare delivery together with continuation planning and resource management, as appropriate for national context. Importance of continuity, coordination and evaluation of care pathways. Managing human resources, lay carers, nursing colleagues and students.

## BIBLIOGRAPHY AND RESOURCES

Bryant-Lukosius, D., Spichiger, E., Martin, J., Stoll, H., Kellerhals, S.D., Fliedner, M., Schwendimann, R., 2016. Framework for evaluating the impact of advanced practice nursing roles. *J. Nurs. Scholarsh.* 48(2): 201-209.

Cummings, G.G., MacGregor, T., Davey, M., Lee, H., Wong, C.A., Lo, E., Muise, M., Stafford, E., 2010. Leadership styles and outcome patterns for the nursing workforce and work environment: A systematic review. *Int. J. Nurs. Stud.* 47(3): 363-85.

Friese, C.R., 2012. Practice environments of nurses employed in ambulatory oncology settings: Measure refinement. *Oncol. Nurs. Forum.* 39(2): 166e172.

Kouzes, J.M., Posner, B.Z., 2007. *The Leadership Challenge*, fourth ed. Jossey Bass, San Francisco.

Mallory, G.A., 2016. Strategies for professional nursing associations to contribute to evidence-based practice and high quality health care. *J. Perioper. Crit. Intensiv. Care Nurs.* 2(124): 2.

Mariner, Tomey, A., 2004. *A Guide to Nursing Management and Leadership*, seventh ed. Mosby, St. Louis.

Marquis, B.L., Harrison, C.J., 2006. *Leadership Roles and Management Functions in Nursing*, fifth ed. Lippincott, Williams and Wilkins, Philadelphia.

National Cancer Control Programme/Office of the Nursing and Midwifery Services Director, 2012. A strategy and educational framework for nurses caring for people with cancer in Ireland. NCCP/HSE/ONMSD.

NHS Leadership Academy, 2011. Clinical leadership competency framework. NHS Institute for Innovation and Improvement. <https://www.leadershipacademy.nhs.uk/wp-content/uploads/2012/11/NHSLeadership-Leadership-Framework-Clinical-Leadership-Competency-Framework-CLCF.pdf> Accessed (12 February 2018).

Oncology Nursing Society (ONS), 2012. Leadership competencies. <https://www.ons.org/sites/default/files/leadershipcomps.pdf> Accessed (12 February 2018).

Opee, N., Galloway, J., 2009. Leadership and Management in Healthcare, second ed. Sage, London.

Parkin, P., 2009. Managing Change in Healthcare: Using Action Research. Sage, London.

Pedler, M., Burgoyne, J., Boydell, T., 2007. A Manager's Guide to Self-Development, fifth ed. McGraw Hill, London.

Rosenzweig, M., Giblin, J., Morse, A., Sheehy, P., Sommer, V., 2012. Bridging the gap: A descriptive study of knowledge and skill needs in the first year of oncology nurse practitioner practice. *Oncol. Nurs. Forum.* 39(2): 195e201.

Sullivan, E.J., Decker, P.J., 2009. Effective Leadership and Management in Nursing, seventh ed. Pearson Prentice Hall, London.

Travaglia, J., Debono, D., 2009. Clinical audit: A comprehensive review of the literature. [http://health.gov.ie/wp-content/uploads/2015/01/literature\\_review\\_clinical\\_audit.pdf](http://health.gov.ie/wp-content/uploads/2015/01/literature_review_clinical_audit.pdf) Accessed (12 February 2018).

Woodward, S., 2011. Patient safety: A core value of nursing - so why is achieving it so difficult? [Review]. *J. Res. Nurs.* 16(3): 224-225.

Yagasaki, K., Komatsu, H., 2011. Preconditions for successful guideline implementation: Perceptions of oncology nurses. *BMC Nurs.* 10: 23.

Yukl, G., 2002. Leadership in Organisations, fifth ed. Prentice Hall, Upper Saddle River, USA.

# Module 8

## Research Utilisation and Evidence in Cancer Care



**Suggested ECTS credit points: 6**

Contact hours: 60 hours

Study hours with practice: 120 hours

### **MODULE OVERVIEW**

The overall aim of this module is to provide the learner with the necessary knowledge and skills to enhance research utilisation and the provision of evidence-based care.

Cancer nurses play a central role in the development and implementation of evidence-based practice. An understanding of the research process and the different research methodologies (including clinical trials) is necessary to facilitate research utilisation, initiate quality assurance processes and the implementation of evidence-based care. This module aims to develop the skills of the learner regarding searching, retrieving and critically appraising research for cancer care in cancer nursing.

LEARNING OUTCOMES	PRACTICE COMPETENCIES	LEARNING CONTENT (in alphabetical order)
<p>At the end of this module, cancer nurses will be able to:</p> <p>1. Explain how knowledge and evidence are developed for clinical practice.</p>	<p>At the end of this module, cancer nurses will be able to:</p> <p>Demonstrate the ability to provide an evidence-based rationale for interventions in cancer care in general and in cancer nursing in particular.</p> <p>Identify the strengths and limitations of the different research methodologies employed.</p>	<p>Barriers to and facilitators of research utilisation.</p> <p>Different research designs, their strengths and limitations.</p> <p>Ethical issues in research and evidence-based change.</p> <p>Importance of research utilisation in nursing.</p> <p>Introduction to research methodologies and evidence-based practice.</p> <p>Levels of evidence pyramid.</p> <p>Use of specialist knowledge to contribute to the development of evidence-based policies and procedures and practice development for cancer nursing.</p> <p>Writing reports, presentation of clinical research/evidence.</p>
<p>2. Identify the key sources of research and evidence-based clinical practice guidelines (CPGs) relevant to cancer care and cancer nursing.</p>	<p>Retrieve high quality research articles and evidence-based guidelines relevant to cancer care and cancer nursing by formulating effective research questions and utilising effective search strategies for sourcing relevant electronic and print material.</p>	<p>Effective search strategies, information skills tutorials.</p> <p>Electronic databases (e.g. PubMed, CINAHL Plus, Embase, PsycINFO, Cochrane library); print/e-journals and print/e-books.</p> <p>Relevant websites for CPGs/evidence-based resources (see “Resource list”).</p> <p>Use of validated criteria/framing structures to formulate research questions (e.g. PICO, PICOT).</p>
<p>3. Critically appraise peer-reviewed research articles and CPGs relevant to cancer care and cancer nursing.</p>	<p>Appropriately apply evidence-based recommendations in the clinical area having considered the strengths and limitations of the research.</p>	<p>Analytical and critical thinking.</p> <p>Critical Appraisal Skills Programme (CASP).</p> <p>Clinical decision-making (internal and external evidence).</p>

LEARNING OUTCOMES	PRACTICE COMPETENCIES	LEARNING CONTENT (in alphabetical order)
<p>At the end of this module, cancer nurses will be able to:</p> <p>4. Describe the principles of cancer clinical trials and discuss the role of the nurse in this context.</p>	<p>At the end of this module, cancer nurses will be able to:</p> <p>Provide safe and effective care to patients on clinical trials in accordance with study protocols with a view to ensuring optimal outcomes and experiences for patients.</p>	<p>Introduction to cancer clinical trials including the different types (phases), benefits, risks and ethical implications.</p> <p>The role of the nurse in cancer clinical trials: utilisation of appropriate strategies to safeguard the interests and wellbeing of patients including the obtaining of informed consent, maintaining patient confidentiality and dignity, documenting and reporting drug interactions or other adverse events where required.</p> <p>The role of the cancer nurse in nursing-led clinical trials and trials on prevention and screening.</p>
<p>5. Describe the use of health services research in cancer service development and explore the role of clinical audit in practice development.</p>	<p>Describe and contribute to health services research and clinical audit in their clinical area.</p>	<p>Health service evaluation and clinical audit.</p> <p>Health technology assessments.</p> <p>Resources required to support clinical audit, ethical issues and data protection.</p> <p>The five-stage approach to clinical audit.</p>

## BIBLIOGRAPHY AND RESOURCES

American Society of Clinical Oncology (ASCO). Clinical practice guidelines. <http://www.asco.org> Accessed (17 January 2018).

Ashmore, S., Ruthven, T., 2008. Clinical audit: A guide. *Nurs. Manag.* 15(1): 18-22.

Aveyard, H., 2014. [Doing a literature review in health and social care: A practical guide](#). Open University Press, McGraw Hill Education.

Bowling, A., 2009. *Research methods in health: Investigating health and health services*. Open University Press, McGraw Hill Education.

Cochrane Handbook for Systematic Reviews of Intervention. <http://www.thecochranelibrary.com/view/0/AboutCochraneSystematicReviews.html> Accessed (17 January 2018).

Critical Appraisal Skills Programme (CASP), 2017. CASP UK: Better Value Healthcare Ltd Oxford. <http://www.casp-uk.net/casp-tools-checklists> Accessed (17 January 2018).

Delin Eriksson, A., 2011. Symptom management: Let's do it evidence based. *Eur. J. Cancer.* 47: S327-8.

- Dicenso, A., Guyatt, G., Ciliska, D., 2005. Evidence-based nursing. A guide to clinical practice. Elsevier Mosby, Philadelphia.
- European Oncology Nursing Society (EONS). Euro PEP (Putting Evidence into Practice) guidelines. <http://www.cancernurse.eu/education/europepeps.html> Accessed (17 January 2018).
- European School of Oncology (ESO). e-ESO Sessions. <https://www.e-eso.net/about.do> Accessed (17 January 2018).
- European Society for Medical Oncology (ESMO). Clinical practice guidelines. <http://www.esmo.org/Guidelines> Accessed (17 January 2018).
- Gough, D., James, T., Sandy, O., (Eds.), 2012. An introduction to systematic reviews. Sage Publications, London.
- Greenhalgh, T., 2014. How to read a paper: The basics of evidence based medicine, fifth ed. Wiley-Blackwell, Oxford.
- Grove, S.K., Gray, J.R., Burns, N., 2015. Understanding nursing research: building an evidence-based practice, sixth ed. Elsevier Saunders, St Louis, Missouri.
- Guyatt, G., Rennie, D., (Eds.), 2008. Users' guides to the medical literature. A manual for evidence - based clinical practice, fourth ed. AMA, Chicago.
- National Comprehensive Cancer Network (NCCN). Clinical practice guidelines in oncology. <http://www.nccn.org/> Accessed (17 January 2018).
- NHS Improvement, 2017. Handbook of Quality Service Improvements and Redesign Tools. ACT Academy, London. <https://improvement.nhs.uk/resources/qsir-programmeme/> Accessed (17 January 2018).
- Oncology Nursing Society (ONS) PEP Guidelines. <https://www.ons.org/practice-resources/pep> Accessed (17 January 2018).
- Oncology Nursing Society (ONS), 2010. Oncology clinical trials nurse competencies. [https://www.ons.org/sites/default/files/OCTN\\_Competerencies\\_FINAL.PDF](https://www.ons.org/sites/default/files/OCTN_Competerencies_FINAL.PDF) Accessed (17 January 2018).
- Polit, D.F., Beck, C., 2013. Nursing research: Generating and assessing evidence for nursing practice: Generating and assessing evidence for nursing practice. Wolters Kluwer Health / Lippincott, Philadelphia.
- Porzsolt, F., Ohletz, A., Thim, A., Gardner, D., Ruatti, H., Meier, H., Schlotz-Gorton, N., Schrott, L., 2003. Evidence-based decision making — The six step approach. *Evid. Based Med.* 8: 165-166.
- Sackett, D.L., Strauss, S.E., Richardson, W.S., Rosenberg, W., Haynes, R.B., 2010. Evidence-based medicine. How to practice and teach it, fourth ed. Churchill Livingstone, London.
- Squires, J.E., Estabrooks, C.A., Gustavsson, P., Wallin, L., 2011. Individual determinants of research utilisation by nurses: A systematic review update. *Implement. Sci.* 6: 1.
- Thompson, C.L., Cullum, N., McCaughan, D., Sheldon, T., Raynor, P., 2004. Nurses, information use, and clinical decision making - The real world potential for evidence-based decisions in nursing. *Evid. Based Nurs.* 7(3): 68-72.
- UCLA Forming Evidence-Based (EBP) Questions (using the PICO framework). <http://guides.library.ucla.edu/c.php?g=180208&p=1589210> Accessed (17 January 2018).
- University of York: Centre for reviews and dissemination, 2009. Systematic Reviews: CRD's guidance for undertaking reviews in healthcare. [https://www.york.ac.uk/media/crd/Systematic\\_Reviews.pdf](https://www.york.ac.uk/media/crd/Systematic_Reviews.pdf) Accessed (17 January 2018).

# Advanced Cancer Nursing Roles

One of EONS' most important strategies is to gain recognition for cancer nursing as a specialty all over Europe, which means that specialist cancer nursing programmes should be available in all countries. However, despite cancer nursing's added value in terms of patient outcomes, regulations and requirements for and recognition of advanced cancer nursing roles vary across Europe.

The EONS Cancer Nursing Education Framework provides nurses, nursing educators, clinical instructors and healthcare organizations with guidance, identifying the knowledge, skills and competencies required by nurses who care for PABC whatever their level of practice.

However, it is crucial to recognize that it is vitally important for nurses who complete the modules to continue their professional development and build upon the knowledge and skills outlined in this document. Research shows that higher nursing education is associated with improved patient outcomes and safety (Aiken et al, 2014) and that advanced nursing roles are safe, effective and well received by patients (ICN, 2017).

Existing advanced cancer nursing roles vary considerably across Europe at present. Cancer nurses in the UK, Netherlands and Ireland may have roles as clinical nurse specialists (CNS), nurse practitioners (NP) or advanced nurse practitioners (ANP) with very wide-ranging tasks (described below). In most cases, a master's degree or higher academic title is required for these roles. Other countries, such as Sweden, have specific roles in cancer care e.g. contact nurses, which have been associated with improved cancer patient experiences. However, this role does not formally require specialization in cancer nursing or any higher academic qualifications, making the role unclear and unspecific. Countries without established and formally recognized advanced cancer nursing roles risk losing many highly-qualified nurses in clinical practice (Lagerlund et al, 2015).

The International Council of Nurses (ICN, 2017) has developed guidelines for the NP and ANP role. The educational requirements include:

- educational preparation at an advanced level
- formal recognition of educational programmes
- accreditation
- formal system of licensure, registration and certification.

ICN also describe the nature of practice for the NP and ANP roles (ICN, 2017). This includes the following:

- integrates research, education, practice and management
- high degree of professional autonomy and independent practice
- case management/own case load
- advanced health assessment skills, decision-making skills
- diagnostic reasoning skills
- recognized advanced clinical competencies
- provision of consultant services to other health providers

- plans, implements and evaluates programmes
- recognized as first point of contact for clients.

There are also regulatory mechanisms related to the NP and APN role that may be country specific. Among these regulations are:

- right to diagnose
- authority to prescribe medication
- authority to prescribe treatment
- authority to refer clients to other professionals
- authority to admit patients to hospital and other health care facilities.

Cancer nurses who develop their level of practice, in advanced level roles, can continue to develop their competencies and are often clinical role models, mentors, leaders, and supervisors and able to influence practice and policy. They could therefore, have a positive impact on quality of care, turnover rates, recruitment and other important factors in health care. It is important to offer clinical nursing positions which require higher academic qualifications that could be combined with development and research, to enable cancer nurses to work to their full potential and to guarantee access to advanced cancer nursing care for PABC.

#### **BIBLIOGRAPHY AND RESOURCES**

Aiken, L.H., Sloane, D.M., Bruyneel, L., Van den Heede, K., Griffiths, P., Busse, R., Diomidous, M., Kinnunen, J., Kózka, M., Lesaffre, E., McHugh, M.D., Moreno-Casbas, M.T., Rafferty, A.M., Schwendimann, R., Scott, P.A., Tishelman, C., van Achterberg, T., Sermeus, W., RN4CAST consortium, 2014. Nurse staffing and education and hospital mortality in nine European countries: A retrospective observational study. *Lancet*. 383(9931): 1824-30.

European Oncology Nursing Society (EONS), 2015. EONS position statement: The role of nurses in cancer care. <http://www.cancernurse.eu/advocacy/positionstatementcancercare.html> Accessed (17 January 2018).

International Council of Nurses (ICN), 2017. Aim and objectives of the ICN international nurse practitioner / advanced practice network. <https://international.aanp.org/Practice/APNRoles> Accessed (17 January 2018).

Lagerlund, M., Sharp, L., Lindqvist, R., Runesdotter, S., Tishelman, C., 2015. Intention to leave the workplace among nurses working with cancer patients in acute care hospitals in Sweden. *Eur. J. Oncol. Nurs.* 19(6): 629-37.

WHO, Triple Impact, 2016. How developing nursing will improve health, promote gender equality and support economic growth. A report by the all-party parliamentary group on global health. [http://www.who.int/hrh/com-heeg/digital-APPG\\_triple-impact.pdf](http://www.who.int/hrh/com-heeg/digital-APPG_triple-impact.pdf) Accessed (17 January 2018).



**The EONS Cancer Nursing Education Framework 2018 was produced by the European Oncology Nursing Society**

A PDF version of the Framework is available at: [www.cancernurse.eu/education](http://www.cancernurse.eu/education)

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