

A framework  
for continuing  
professional  
development  
for nurses working  
with children and  
adolescents with  
cancer

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**Disclaimer:** The information in this framework is considered to be true and correct at the date of publication, however, changes in circumstances after the time of publication may impact on the accuracy of this information.

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# 1. Introduction

Paediatric oncology nursing is a rapidly changing field of practice. Advances in treatments, technologies and care requirements necessitate dynamic professional development opportunities to ensure that paediatric nurses are equipped to provide quality care to children and adolescents with cancer, and their families.

The delivery of best practice, safe clinical care requires a skilled and competent workforce. The National Cancer Workforce Strategic Framework (2013), developed by Health Workforce Australia, documents a vision for a *'skill-based cancer workforce delivering safe, effective, consumer-centred care in the most appropriate setting'*.<sup>1</sup> The Framework articulates the need to create a cancer workforce that is planned, flexible and innovative; skilled to optimise safe, effective and consumer focused care; and aligned with best practice pathways. In addition, the Framework describes a workforce with capability to respond rapidly to new and emergent evidence and technologies; is able to support leadership and professional development; utilises expert clinical staff effectively and efficiently; is socially and culturally responsive, and is developed in accordance with robust monitoring and evaluation processes.

There are various documents in the literature that provide guidance for the professional development and growth of paediatric oncology nurses. The 2016 position paper from the Association of Pediatric Hematology/Oncology Nurses (APHON), and the American Society of Clinical Oncology/Oncology Nursing Society, state that all oncology nurses working within paediatric cancer care must demonstrate clinical knowledge and competency, expertise within their field and pursuit of continuing education opportunities. In addition, health care services providing paediatric cancer care must provide:

- Comprehensive education programs and competency assessments to ensure quality cancer care
- Ongoing support of nursing competency through professional development and skills evaluation
- Support programs to develop critical thinking, coping skills and knowledge attainment<sup>2</sup>
- Specialist training for experienced oncology nurses and new graduates, or nurses new to paediatric oncology by providing orientation and clinical practicum.

The Australian and New Zealand Children's Haematology/Oncology Group (ANZCHOG) has a documented position statement outlining workforce and system-level education and safety requirements for the administration of anti-cancer therapy to children and adolescents with cancer.<sup>3</sup> This statement outlines the need for a family centred model of care, with documented competencies in paediatric chemotherapy education, clinical trials, multidisciplinary care and supportive care. To date however, there has been no articulated framework for continuing professional development of Australian paediatric oncology nurses.

In 2009, the National Cancer Nursing Education Project (EdCaN) was undertaken in Australia to develop a national professional development framework for cancer nursing.<sup>4</sup> Underpinned by seven key principles, the EdCaN framework describes four broad groups of nurses:

- **All** nurses demonstrate Australian Nursing and Midwifery Council (ANMC) competencies applied to cancer control
- **Many** nurses demonstrate the ability to apply ANMC competencies at a more advanced level in specific practice contexts
- **Some** nurses demonstrate the ability to practice according to competency standards for specialist cancer nurses
- **Few** nurses, in addition to meeting competency standards for specialist practice, are credentialed to practise at an advanced level or in extended practice roles.

While the EdCaN model provides a valuable framework for the Australian cancer-nursing workforce, it does not specifically target the professional development needs of paediatric oncology nurses.

In 2014, the Paediatric Integrated Cancer Service (PICS) developed a Service Capability Framework for paediatric oncology, which included reference to minimum nursing competency requirements for Victorian health services providing paediatric cancer care.<sup>5</sup> Recognising the development of the paediatric oncology nursing workforce as a priority area, in 2016/17, the PICS undertook a comprehensive consultation project to identify current education practices and professional development needs of paediatric oncology nurses across Australia and New Zealand. The project provided insight into contemporary professional development needs of paediatric oncology nurses. Following this work, and during consultation for the PICS Strategic Plan 2016-19, the PICS identified the need for and importance of developing a framework for continuing professional development (CPD) for nurses working with children and adolescents with cancer (the Framework).

## 2. Overview of the Framework

“Learning and development occurs throughout a nurse’s career. CPD is an important foundation of lifelong learning and helps nurses maintain their competence to practice. CPD aims to enable nurses to maintain, improve, and broaden their professional knowledge, expertise and competence to meet their obligation to provide ethical, effective, safe and competent practice.”

Nursing and Midwifery Board of Australia<sup>6</sup>

### 2.1. Overview

The Framework has been developed to provide CPD guidance for paediatric oncology nurses, and should complement health service-specific requirements for core skills and competencies, as well as standards for continuing professional development defined by the relevant nursing regulation agency.<sup>7</sup> It is specific to paediatric oncology practice and is aimed at registered nurses working in paediatric oncology settings.

The Framework provides high level guidance for advancing practice of the paediatric oncology workforce, and can be used by individual nurses, nurse educators and health service leaders. Within paediatric oncology nursing there are various career development pathways, including clinical care, education, advanced or enhanced scope of practice roles, research and leadership. The Framework should be utilised within the context of each individual nurse’s scope of practice and assessed levels of competency.

### 2.2. What is continuing professional development?

“CPD is the means by which members of the profession maintain, improve and broaden their knowledge, expertise and competence, and develop the personal and professional qualities needed throughout their professional lives.”

Nursing and Midwifery Board of Australia<sup>6</sup>

The Framework has adopted the Nursing and Midwifery Board of Australia’s definition for CPD. To maintain the knowledge and skills required to practice safely, nurses rely on CPD opportunities. Such opportunities may take the form of formal post-graduate qualifications, study days, eLearning modules, conferences, webinars, journal clubs and participation in committees, meetings and service improvement activities.

### 2.3. Purpose

As treatments, technologies and care requirements continue to evolve for children and adolescents with cancer, the importance of CPD opportunities for paediatric oncology nurses also increases. The Framework outlines the knowledge and skills required by paediatric oncology nurses, from novice/beginner nurse to expert to enable them to care safely for children and adolescents with cancer.

The aims of this framework are to:

- Articulate the knowledge required and application of skills/theoretical understanding along the career pathway from novice/beginner to expert
- Enable individual nurses to inform their own CPD
- Support paediatric oncology nurse educators to create and deliver educational opportunities tailored to the target audience
- Deliver a health service level framework to inform CPD opportunities for the paediatric oncology nursing workforce.

The Framework is intended to complement existing nursing education and relevant regulatory practice requirements. It does not replace practice standards, nor does it seek to replace individual role position descriptions. Rather, this document provides a Framework that makes explicit to nurses how CPD opportunities enable them to meet practice standards within the context of paediatric oncology and advance their career. Furthermore, the Framework aims to support professional development of the paediatric nursing workforce, strengthening their capability to contribute to the outcomes of children, adolescents and families impacted by childhood cancer through clinical care, leadership, education and research.

## 2.4. Levels of practice

It is recommended that nurses wishing to pursue a career in paediatric oncology begin with a foundation in paediatric nursing or adult oncology nursing, although this is not mandatory. ANZCHOG recommends that the pre-requisite knowledge and skills held by a registered nurse looking to pursue a career in paediatric oncology align with the minimum standards for nurses caring for children and young people defined by the Australian College of Children & Young People's Nurses.<sup>3,8</sup> The nurse should be able to:

- Recognise growth and development within the domains of physical, emotional, social, cognitive and cultural
- Minimise procedural distress
- Understand varying emotional responses and vocabulary
- Be able to act as an advocate, to assist in communication and expression of needs and informed decision making
- Understand the family-centred philosophy of paediatric care
- Demonstrate competency in paediatric basic life support
- Demonstrate competency in preparing and administering medications to children
- Have an awareness of the use of age-specific assessment tools for symptom evaluation and management
- Communicate effectively with children and families.

The Framework is intended to be a dynamic model, recognising that the development of expertise and understanding is a continuum that is contextual to a nurse's place of practice, scope of practice and different roles. Further, the Framework is underpinned by the premise that competency is developed over time, with education and experience. The paediatric oncology nursing levels of practice in the Framework have been adapted from the internationally recognised "Stages of Clinical Competence" developed by Dr Patricia Benner (1982).<sup>9</sup> These stages are used to describe the proficiency that a paediatric oncology nurse may transition through as they advance their practice.

In this framework, two of Benner's original stages have been modified to better reflect the career progression of a paediatric oncology nurse:

- The first stage of 'Novice' has been revised as 'Beginner' in this framework to reflect that a nurse may be new to paediatric oncology but not to nursing.
- The third stage of 'Competent' is referred to in this framework as 'Consolidated', to better reflect a stage of clinical practice, where the paediatric oncology nurse is consolidating and advancing their knowledge and skills across a range of paediatric oncology conditions.

Figure 1 describes Benner's stages of clinical competence, while Figure 2 articulates the adaptation of these stages for this framework.

Figure 1: Benner's Stages of Clinical Competence (1982)<sup>9</sup>

NOVICE	ADVANCED BEGINNER	COMPETENT	PROFICIENT	EXPERT
"No experience with the situations in which they are expected to perform tasks"	"Can demonstrate marginally acceptable performance. This person is one who has coped with enough real situations..."	"Typified by the nurse who has been on the job two to three years, develops when the nurse begins to see his or her actions in terms of long-range goals or plans"	"Experience teaches the proficient nurse what typical events to expect in a given situation and how to modify plans in response to these events"	"No longer relies on an analytical principle to connect her/his understanding of the situation to an appropriate action.... Has an intuitive grasp of the situation"

Figure 2: the Framework's five levels of practice, adapted from Benner's Stages of Clinical Competence

BEGINNER	ADVANCED BEGINNER	CONSOLIDATED	PROFICIENT	EXPERT
The <b>Beginner</b> nurse is new to paediatric oncology and requires education, mentorship and support to perform safely and effectively within their role.	The <b>Advanced Beginner</b> nurse is working towards being able to demonstrate an acceptable level of practice as defined by organisational competencies and practice standards, with ongoing support to enable tailored knowledge development.	The <b>Consolidated</b> nurse is consolidating their skills (level) across a range of paediatric oncology conditions and has developed a demonstrable and assessable level of clinical practice within paediatric oncology.	The <b>Proficient</b> nurse demonstrates an evidence-informed approach to family-centred care and is actively working towards advanced practice skills in a sub-specialist area of paediatric oncology nursing, advanced clinical knowledge and complex decision-making skills.	The <b>Expert</b> nurse demonstrates both breadth and depth of sub-specialty knowledge; practice is based on evidence, experience and clinical intuition and practice is characterised by active teaching, research activity, cultural leadership and exemplary management of complex clinical caseloads and environments of care.

In conceptualising the Framework, the EdCan professional development framework (All, Many, Some, Few) provides a useful model to articulate expectations around nursing knowledge and skill at different levels of practice<sup>4</sup>. Relative to the individual nurse’s scope of practice, clinical setting and role, there is an expectation that **all** paediatric oncology nurses, once they have advanced beyond “beginner” level of practice, reach an “advanced beginner” level of practice. **Many** nurses who regularly provide paediatric oncology nursing care require professional development opportunities to enable them to achieve a consolidated level of practice. **Some** or **few** nurses will require extended professional development opportunities to meet the knowledge and skills detailed to perform at proficient and expert practice levels.



## 2.5 Domains of practice

The Framework is underpinned by the domains of practice articulated within the Certified Pediatric Hematology Oncology Nurse (CPHON®) test blueprint, developed by the Oncology Nursing Certification Corporation.<sup>10</sup> These domains of practice have been adapted to the Victorian context (haematology specific sub-categories are excluded) as part of the development of the Framework. They are intended to provide a comprehensive outline to support the professional development of paediatric oncology nurses.

Figure 3: Eight essential domains of practice and sub-categories adapted from the Pediatric Hematology Oncology Nurse certification (2019)<sup>13</sup>

Domain of practice	Sub-categories
<b>1. Professional performance</b>	<ul style="list-style-type: none"> <li>• Scope and standards of nursing practice</li> <li>• Ethical practice</li> <li>• Evidence-based practice</li> <li>• Self-care</li> <li>• Leadership</li> <li>• Supervision</li> <li>• Quality improvement</li> <li>• Research</li> <li>• Publication</li> </ul>
<b>2. Disease related biology</b>	<ul style="list-style-type: none"> <li>• Types of childhood cancers               <ul style="list-style-type: none"> <li>– Epidemiology</li> <li>– Presentation</li> <li>– Tests and investigations</li> <li>– Diagnosis, risk stratification and/or staging</li> <li>– Genetics (including genomics)</li> <li>– Pathophysiology</li> </ul> </li> </ul>
<b>3. Treatment</b>	<ul style="list-style-type: none"> <li>• Chemotherapy</li> <li>• Safe handling of hazardous substances</li> <li>• Targeted therapy               <ul style="list-style-type: none"> <li>– Immunotherapy</li> <li>– Biotherapy</li> <li>– Cellular therapy (e.g. CAR T-cell therapy)</li> </ul> </li> <li>• Radiation therapy</li> <li>• Surgery</li> <li>• Haematopoietic stem cell transplantation</li> <li>• Clinical trials</li> </ul>
<b>4. Acute side effects of therapy</b>	<ul style="list-style-type: none"> <li>• Side effects related to               <ul style="list-style-type: none"> <li>– Radiotherapy</li> <li>– Chemotherapy</li> <li>– Targeted therapy</li> <li>– Haematopoietic stem cell transplant</li> <li>– Surgery</li> </ul> </li> <li>• Transfusion</li> </ul>

Domain of practice	Sub-categories
<b>5. Psychosocial dimensions and health maintenance</b>	<ul style="list-style-type: none"> <li>• Principles of growth and development</li> <li>• Screening, assessment and resources</li> <li>• Patient and family/caregiver support</li> <li>• Grief and bereavement</li> <li>• Cultural and spiritual support</li> <li>• Social integration and community resources</li> <li>• Immunisations</li> <li>• Health promotion and wellness</li> <li>• Transition</li> <li>• Reproductive health and fertility optimisation</li> </ul>
<b>6. Supportive care, palliative care and symptom management</b>	<ul style="list-style-type: none"> <li>• Pain management</li> <li>• Mental health</li> <li>• Medical devices (e.g. port, shunt, tubes)</li> <li>• Multidisciplinary care</li> <li>• End of life care</li> <li>• Complementary and alternative medicines</li> <li>• Central venous access devices</li> <li>• Nutrition</li> </ul>
<b>7. Paediatric oncological emergencies</b>	<ul style="list-style-type: none"> <li>• Oncology emergencies <ul style="list-style-type: none"> <li>– Sepsis</li> <li>– Gastrointestinal (pancreatitis, typhlitis, bowel obstruction)</li> <li>– Metabolic (diabetes insipidus, SIADH, tumour lysis, cytokine release syndrome)</li> <li>– Vascular (DIC, hyperleukocytosis, haemorrhage, VOD, superior vena-cava syndrome, thrombosis)</li> <li>– Cardiopulmonary (acute chest syndrome, stroke, mediastinal mass, cardiac tamponade, pleural effusions)</li> <li>– Neurology (raised ICP, seizures, posterior fossa syndrome, spinal cord compression)</li> <li>– Hypersensitivity reactions (including anaphylaxis)</li> <li>– Extravasation</li> </ul> </li> </ul>
<b>8. Survivorship</b>	<ul style="list-style-type: none"> <li>• Psychosocial adaptation</li> <li>• Socioeconomic issues</li> <li>• Late effects of therapy</li> </ul>

# 3. The Framework

The Framework maps CPD against the levels and domains of practice described in sections 2.4 and 2.5 of this document. While some sub-categories may be applicable across many or all domains (for example multidisciplinary care), they are presented in the Framework as they appear in the Certified Pediatric Hematology Oncology Nurse (CPHON®) test blueprint.

## 3.1 Professional performance

Professional performance represents the first of the eight domains of practice and underpins the seven subsequent domains outlined in the Framework. All nurses are required to comply with professional performance in accordance with the expectations of their respective nursing regulation agency.

Benner's stage of clinical competence (adapted)	Beginner	Advanced Beginner	Consolidated	Proficient	Expert
<b>Sub-category</b>	Developing <b>awareness and beginning knowledge</b> of:	Developing <b>advanced beginner understanding</b> of:	Developing <b>advanced understanding and application</b> in:	Developing <b>proficient knowledge and routine application</b> in:	Developing <b>expert knowledge and skills</b> in:
<b>Scope and standards of practice</b>	Scope of professional standards of practice including professional, legal and ethical responsibilities. Satisfactory knowledge base and accountability for practice		Acting as a mentor and role model for optimal professional practice that is cognisant of the unique needs of children/adolescents and their families across the disease continuum		Ability to lead, teach and promote all areas of professional performance
<b>Ethical practice</b>	Cancer care that is respectful of the persons dignity, experiences, culture, values, beliefs and rights		Critical reflection and consideration of ethical considerations	Advocating for patients best interests and provision of care in complex ethical situations	
<b>Evidence-based practice</b>	The importance of evidence-based practice and how to integrate this into practice	The utilisation and application of evidence-based practice	Critical analysis of evidence to inform the provision of best practice care	Active contributions to the growth of evidence to support best practice paediatric oncology nursing care	
<b>Self-care</b>	Considerations that impact own and other staff's wellbeing – emotional and physical	Specific risks/challenges within paediatric oncology to health and wellbeing How to access support services and activities to maintain health and wellbeing	Promoting health and wellbeing within the multidisciplinary cancer care team		
<b>Leadership</b>	Provide collegial support Delegation and accountability within area of practice Responsibilities within own scope of practice		Mentorship for students or less experienced staff	Service development and planning. Involvement in leadership activities such as working groups, responsible for clinical portfolios	
<b>Supervision</b>	The role and importance of supervision to support reflective practice and professional development		How to optimise and actively participate in supervision opportunities	Developing mentor and supervisor skills to provide supervision within the team	

Benner's stage of clinical competence (adapted)	Beginner	Advanced Beginner	Consolidated	Proficient	Expert
<b>Sub-category</b>	Developing <b>awareness and beginning knowledge</b> of:	Developing <b>advanced beginner understanding</b> of:	Developing <b>advanced understanding and application</b> in:	Developing <b>proficient knowledge and routine application</b> in:	Developing <b>expert knowledge and skills</b> in:
<b>Quality improvement</b>	The role of quality improvement, risk reporting and management, audits and continuous improvement cycles		Audit and quality improvement activities that have specific relevance to cancer care	Leading quality improvement projects in collaboration with the wider team to drive practice improvement and changes  Accreditation processes and responsibilities	
<b>Research</b>	The importance of research and evidence based frameworks to support best practice care – particularly supportive care across the cancer continuum  The role of clinical trials in childhood cancer		Understanding the principles of good clinical practice in health research	Research that contributes to the development of knowledge in childhood cancer care	
<b>Publication</b>	The importance of nurse-led research and sharing evidence through publication.		Accessing and critiquing relevant paediatric oncology literature	Writing an abstract for conference presentation	Writing an article for publication

## 3.2. Disease related biology

The incidence of childhood cancer is rare and understanding the pathogenesis, diagnosis and epidemiology of cancer in the paediatric patient is critical to providing best practice cancer care. The domain of disease related biology encapsulates the area of study related to epidemiology, presentation, tests and investigations, diagnosis, risk stratification and/or staging, genetics (including genomics) and pathophysiology of *each type of paediatric cancer*.

Benner's stage of clinical competence (adapted)	Beginner	Advanced Beginner	Consolidated	Proficient	Expert
Sub-category	Developing <b>awareness and beginning knowledge</b> of:	Developing <b>advanced beginner understanding</b> of:	Developing <b>advanced understanding and application</b> in:	Developing <b>proficient knowledge and routine application</b> in:	Developing <b>expert knowledge and skills</b> in:
					
Epidemiology	Cancer epidemiology		Methods and interpretations of epidemiology		All types of paediatric cancers, (including rare sub-groups) to promote education, develop clinical governance and foster publication of nurse-led research.
Presentation	Presenting signs and symptoms for common childhood cancers		Presenting signs and symptoms in the context of staging and/or risk, and anticipating nursing interventions.	Interpretation of presenting signs and symptoms to facilitate planning of prospective tests and investigations.	
Tests and investigations	Common tests and investigations required throughout the cancer care continuum		The timing of common and complex tests and investigations and implications of results to patient care and treatment	Interpretation of findings to guide prospective treatment planning and prognosis.	
Diagnosis, risk stratification and/or staging	Risk stratification and/or staging for common childhood cancers		Tests and investigations for risk stratification and staging for all childhood cancers	The use of risk stratification and staging to inform treatment and prognosis throughout the cancer care continuum	
Genetics (including genomics)	Cancer genetics		Cancer genetics and genomics in the context of the individual patient, their disease, prognosis and prospective treatment planning		
Pathophysiology	Essentials in anatomy and pathophysiology of common childhood cancers		Anatomy and pathophysiology of all childhood cancers and related disease processes		

### 3.3 Treatment

Delivering and monitoring delivery of treatment for cancer are essential components of the role of a paediatric cancer nurse. The domain of treatment encapsulates the common, new and emerging treatment modalities, safety in the administration of treatments and the use of complementary and alternative medicines in the care of paediatric cancer patients.

Benner's stage of clinical competence (adapted)	Beginner	Advanced Beginner	Consolidated	Proficient	Expert
<b>Sub-category</b>	Developing <b>awareness and beginning knowledge</b> of:	Developing <b>advanced beginner understanding</b> of:	Developing <b>advanced understanding and application</b> in:	Developing <b>proficient knowledge and routine application</b> in:	Developing <b>expert knowledge and skills</b> in:
<b>Safe handling of hazardous substances</b>	All nurse educators and administrators are required to ensure that all nurses working in an area that delivers hazardous substances or chemotherapy are competent in the handling of cytotoxic waste (as per health service policy). Nurses administering chemotherapy are required to demonstrate competence in the safe handling and administration of chemotherapy and hazardous substances.				
<b>Chemotherapy/targeted therapies</b>	Chemotherapy competency is not articulated in this framework. A nurse administering chemotherapy must meet requirements as specified by the individual health service. Annual update of training and emerging and novel therapies is recommended.				
	Common chemotherapy agents	The supportive care requirements of patients receiving chemotherapy/targeted therapy	The rationale and use of chemotherapy/targeted therapy protocols	The pharmacokinetics and dynamics of chemotherapy/targeted therapy	Leadership, education, publication and guideline development related to the nursing contribution towards paediatric oncology treatment.
<b>Radiation therapy</b>	Radiation therapy fundamentals	The indications for radiation therapy and identifying acute side effects	Radiation therapy techniques, technologies and planning.		
<b>Surgery</b>	Surgical interventions for diagnosis, treatment and management		The rationale for surgical decision making and surgical techniques	The overall management plan of patients who require surgical interventions	
<b>Hematopoietic stem cell transplantation (HSCT)</b>	Basic principles of HSCT	The clinical complexities and care pathways required to deliver HSCT  The indications for HSCT, including the non-malignant conditions requiring transplant	Conditioning regimens  Donor and recipient evaluation  HSCT infusion and recognising and managing associated supportive care needs	The pathophysiology behind HSCT and its potential short and long-term complications	
<b>Clinical trials</b>	Basic concepts and role of clinical trials	The administration and compliance requirements of clinical trials	Understanding key elements of open clinical trials (including research aim, eligibility, risk stratification, phases of care and side effect profile and reporting)  Nursing responsibilities in the conduct of clinical trials	Phase 1 and 2 clinical trials	

### 3.4 Acute side effects of therapy

Caring for a patient receiving treatment for cancer requires understanding, identification and management of treatment and disease-related side effects.

Benner's stage of clinical competence (adapted))	Beginner	Advanced Beginner	Consolidated	Proficient	Expert
<b>Sub-category</b>	Developing <b>awareness and beginning knowledge</b> of:	Developing <b>advanced beginner understanding</b> of:	Developing <b>advanced understanding and application</b> in:	Developing <b>proficient knowledge and routine application</b> in:	Developing <b>expert knowledge and skills</b> in:
<b>Side effects of therapy</b>	Side effects of treatment	Clinical assessment and management of side effects of treatment	The pathophysiology and management of the side effects of treatment	The development of individualised supportive care plans relating to the side effects of treatment	Leadership, education, publication and guideline development related to the nursing management of acute side effects of therapy.

### 3.5 Psychosocial dimensions and health maintenance

A cancer diagnosis and its treatment, including long-term effects can have a profound psychosocial impact on patients and their family. The domain of psychosocial dimensions and health maintenance, describes skills and knowledge in the areas of growth and development, the screening and assessment of psychosocial needs, the understanding of a family centred care approach, grief and bereavement, health promotion and wellness, reproductive health and the cultural and spiritual support needs of patients and families.

Benner's stage of clinical competence (adapted)	Beginner	Advanced Beginner	Consolidated	Proficient	Expert
<b>Sub-category</b>	Developing <b>awareness and beginning knowledge</b> of:	Developing <b>advanced beginner understanding</b> of:	Developing <b>advanced understanding and application</b> in:	Developing <b>proficient knowledge and routine application</b> in:	Developing <b>expert knowledge and skills</b> in:
<b>Growth and development</b>	The impact of cancer and its treatment on a child's growth and development at different developmental stages		The psychosocial impact of cancer and its treatment at high risk stages of growth and development, such as during infancy and adolescence	Specific cancer diagnoses and treatment modalities that have greater risks to a child's psychosocial growth and development	All areas of psychosocial care and health maintenance as it relates to the advanced nurse's scope of practice.  The ability to lead, teach and promote nurse-led research.
<b>Screening, assessment and resources</b>	Psychosocial resources and supports available to patients and their families	Psychosocial screening and assessment tools for identifying supportive care needs of patients and their family	The timing of assessments, at critical time points, for example diagnosis, coming off treatment, transition and relapse  The interpretation of assessment and screening outcomes  How the results of screening and assessment inform multidisciplinary care		

Benner's stage of clinical competence (adapted)	Beginner	Advanced Beginner	Consolidated	Proficient	Expert
<b>Sub-category</b>	Developing <b>awareness and beginning knowledge</b> of:	Developing <b>advanced beginner understanding</b> of:	Developing <b>advanced understanding and application</b> in:	Developing <b>proficient knowledge and routine application</b> in:	Developing <b>expert knowledge and skills</b> in:
					
<b>Patient and family/ caregiver support</b>	The impact of cancer and its treatment on families and carers		Psychosocial interventions and resources to support families and carers  The provision of information and education to patients and families, including recognition of learning style and timing and assessment of education.		
<b>Grief and bereavement</b>	The concepts of grief and bereavement		The child's concept of death, open communication, need for comfort measures and process of grief.  Bereavement support as part of the multidisciplinary team		
<b>Cultural and spiritual support</b>	Cultural and spiritual diversity	Cultural and spiritual diversity, in the context of cancer	The needs of individual patients and families from culturally and linguistically diverse backgrounds in the context of health literacy, decision making and informed consent  Individualising spiritual care and support across the care continuum		
<b>Social integration and community resources</b>	The importance of the child's social network (e.g. school, family, peers)	The child's social environment and the impact of a cancer diagnosis and treatment	Planning the integration of individualised patient care into the child's family, school and social environment		
<b>Immunisations</b>	The impact of cancer treatment on the child's immunity		Teaching families regarding issues related to immunisations during treatment and catch-up schedules following treatment.		
<b>Health promotion and wellness</b>	The importance of adopting healthy lifestyle behaviours during and after treatment for cancer		Identifying lifestyle risk factors and advocating, educating and planning health promotion strategies and interventions during and following treatment		
<b>Transition</b>	The rationale for effective transition in paediatric healthcare		Advocacy and support of the transition of adolescent patients into adult medicine		
<b>Reproductive health and fertility optimisation</b>	Impact of cancer and treatment on fertility		The effects of individualised cancer treatments on reproductive health, including potential fertility optimisation options		

### 3.6 Supportive care, palliative care and symptom management

This domain identifies the supportive care needs of children with cancer, and their families. The domain of supportive care and symptom management (other) covers pain management, medical devices, central venous access devices (CVAD) and nutrition.

Benner's stage of clinical competence (adapted)	Beginner	Advanced Beginner	Consolidated	Proficient	Expert
Sub-category	Developing <b>awareness and beginning knowledge</b> of:	Developing <b>advanced beginner understanding</b> of:	Developing <b>advanced understanding and application</b> in:	Developing <b>proficient knowledge and routine application</b> in:	Developing <b>expert knowledge and skills</b> in:
					
Pain management	Principles of assessment and management for procedural, acute and chronic pain  Developmentally appropriate pain assessment	Pharmacological and non-pharmacological interventions in pain management	Pathophysiology of different pain pathways and causes  Strategies for supporting the child and family in the management of procedural, acute and chronic pain	The development and delivery of management plans for patients with complex pain or heightened procedural distress, in conjunction with the MDT	Applying knowledge to facilitate nurse-led research, education and coordination across systems and departments.  Supportive care knowledge beyond the cancer discipline.
Mental health	General mental health issues experienced by children with cancer and their families	Practical supports (including managing procedural distress) and the role of the wider MDT	Identifying states of impaired mental health in children and their families (e.g. anxiety, depression, PTSD) and providing evidence-based interventions and/or escalating care and referrals		
Medical devices	Medical devices utilised in paediatric oncology and their application	Procedures for the use of medical devices in paediatric oncology	Management of complications of medical devices	Decision making to support appropriate device selection and management	
Multidisciplinary care	The structure and function of the role of multidisciplinary team members in the provision of comprehensive cancer care	How to refer to the multidisciplinary team, and key times to refer	The importance and role of collaborative, coordinated multidisciplinary care  Understanding and initiating referrals for complex multidisciplinary care needs	Leadership and active contribution to multidisciplinary meetings and case conferences and coordination of follow-up care	
End-of-life care	The concept and general principles of end-of-life care in children and adolescents	Applying the principles of end-of-life care within the clinical setting in a supportive MDT environment	The delivery of end-of-life care, maintaining the physical, psychological, spiritual, social and information domains of supportive care	Advanced care planning and development and delivery of end-of-life care plans in conjunction with the MDT	
Complementary and alternative medicines	General concepts of CAM in children and adolescents	The role of CAM in childhood cancer	Assessing and facilitating discussions with the patient and family regarding CAM use		

Benner's stage of clinical competence (adapted)	Beginner	Advanced Beginner	Consolidated	Proficient	Expert
<b>Sub-category</b>	Developing <b>awareness and beginning knowledge</b> of:	Developing <b>advanced beginner understanding</b> of:	Developing <b>advanced understanding and application</b> in:	Developing <b>proficient knowledge and routine application</b> in:	Developing <b>expert knowledge and skills</b> in:
					
<b>Central venous access devices (CVAD)</b>	The types of CVAD and their indications for use	Principles of CVAD management, troubleshooting and indications for insertion and removal		The management of complex CVAD complications	
<b>Nutrition</b>	The importance of promoting good nutrition in the child with cancer	Screening for and when to refer a patient for specialist nutrition support	Interventions used to support optimal nutrition	The development and delivery of management plans for patients with complex nutritional needs, in conjunction with the MDT	

### 3.7 Paediatric oncological emergencies

Paediatric oncological emergencies can occur over the course of a patient’s cancer trajectory from diagnosis, during treatment and post treatment. They are potentially life-threatening issues and paediatric cancer nurses need to be able to recognise, respond and intervene when these occur.

Benner’s stage of clinical competence (adapted)	Beginner	Advanced Beginner	Consolidated	Proficient	Expert
Sub-category	Developing <b>awareness and beginning knowledge</b> of:	Developing <b>advanced beginner understanding</b> of:	Developing <b>advanced understanding and application</b> in:	Developing <b>proficient knowledge and routine application</b> in:	Developing <b>expert knowledge and skills</b> in:
					
Oncological emergencies	Nursing assessment and management of common oncological emergencies, for example: <ul style="list-style-type: none"> <li>• sepsis</li> <li>• hypersensitivity reactions</li> <li>• anaphylaxis</li> </ul>	Nursing assessment and management of more complex oncological emergencies, for example: <ul style="list-style-type: none"> <li>• metabolic</li> <li>• gastrointestinal</li> <li>• vascular</li> <li>• cardiopulmonary</li> <li>• neurological</li> <li>• extravasation</li> </ul>	Oncological emergencies at a pathophysiological level Assessment and early identification of patients at risk of oncological emergencies Leading the nursing management of oncological emergencies with a holistic and family centred approach		Being able to lead clinical nursing care in oncological emergencies, as well as education, development of clinical governance and nurse-led research.

### 3.8 Survivorship

Late and long-term effects of cancer and its treatments can have a significant impact on the paediatric oncology patient well beyond the time of active treatment. The domain of survivorship addresses concepts, assessment, management, health promotion and communication skills in the care of the paediatric patients' overall health into survivorship.

Benner's stage of clinical competence (adapted)	Beginner	Advanced Beginner	Consolidated	Proficient	Expert
Sub-category	Developing <b>awareness and beginning knowledge</b> of:	Developing <b>advanced beginner understanding</b> of:	Developing <b>advanced understanding and application</b> in:	Developing <b>proficient knowledge and routine application</b> in:	Developing <b>expert knowledge and skills</b> in:
					
Late effects of therapy	Late and long-term effects of cancer and/or its treatment	The link between specific treatments and late or long-term effects	The strategies to enable health maintenance from the point of diagnosis  Assessing the risk of late effects in individual patients and developing prospective care plans  Complex and rare late effects from the effect of cancer and/or its treatment		The delivery of nurse-led survivorship clinics, promotion of research and development of clinical governance
Psychological adaptation	The personal and emotional experiences of both the child and family in survivorship		Assessing risk factors for psychological distress and engaging in interventions, escalation and referral as required.		
Socioeconomic issues	The socioeconomic impacts on childhood cancer survivors and their families.		Psychosocial assessment, such as the impact on school, education, employment and financial hardship and developing strategies within a MDT to manage them  Psychosocial assessment tools		

## 4. Summary

The Framework articulates the knowledge, understanding and skills required for paediatric oncology nurses along the career pathway continuum from beginner to expert. It is a resource for nurses, health service administrators, educators and leaders to better understand the professional development requirements and expectations of practice proficiency for paediatric oncology nurses. The Framework can be used to help nurses assess their knowledge and skills in relation to their role. Health services may use the framework to articulate standardised knowledge and skill requirements across different roles and levels of practice.

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