



# GUIDANCE FOR NON MEDICAL REVIEW AND PRESCRIBING AND REVIEW OF ANTICANCER MEDICINES FOR ONCOLOGY AND HAEMATOLOGY PATIENTS.

## Document Control

Prepared By	Issue Date	Approved By	Review Date	Version	Contributors	Comments/ Amendment
Steve Williamson	25/02/09			1.1	Calum Polwart, Ann Fox	
Steve Williamson	25/02/09			1.2 & 1.3	Chemotherapy Group (NCA)	Updated title and text to clarify role of review &
Steve Williamson	18/03/09	Chemotherapy Group (NCA)	18/03/11	Final 1.4	NCA NMPs	Add comments re existing NMP services/ role expansion
	11.7.11	Chemotherapy Group (NCA)	July 2013	1.5.1	As above	Reviewed Date Amended – Removed 1 <sup>st</sup> cycle restriction (p7), updated Pharm Prof body
Steve Williamson	16.02.15	Chemotherapy Group (NCA)	Feb 2017	1.6	Chemotherapy Group (NCA)	General Updates
Steve Williamson	20.06.18		TBC	2.1		Updated all competencies to reflect new 2017 medical oncology training model. Various updates and additions Added in reference to clinical oncology competencies
Steve Williamson	16.07.18	Chemotherapy Group (NCA)	Sept 2021	2.2	Calum Polwart, Helen Roe, Mel Robertson, Wendy Anderson	Revised layout to focus on competencies separated service model into two sections merged section 6,7,8 updated wording on NMP first cycle, changed requirement for framework to optional

For more information regarding this document, please contact:

Steve Williamson  
Consultant Cancer Pharmacist, CNTW Area Team  
NHS England, Waterfront 4, Goldcrest Way,  
Newcastle Upon Tyne, NE15 7NY  
[steve.williamson@nhct.nhs.uk](mailto:steve.williamson@nhct.nhs.uk)

# Guidance for Non Medical Review and Prescribing of Anticancer Medicines for Oncology and Haematology Patients

## Contents

Executive Summary .....	3
Competencies.....	3
NMP Roles .....	3
1 Background .....	4
2 Accountability .....	4
3 Prescribing Responsibilities.....	5
Section B Competencies .....	6
4 NCA Competency Framework.....	7
4.1 Prescribing qualification competencies.....	7
4.2 Chemotherapy prescribing competency framework.....	7
4.3 Medical Royal Collage Competencies. ....	7
4.4 Adoption of Medical Competencies for NMPs .....	8
4.5 Competency Level 1 Reviewing Chemotherapy Patients .....	9
4.6 Competency Level 2: Prescribing Second Cycle Onwards.....	10
4.7 Competency level 3. Prescribing First Cycle .....	11
4.8 Pharmacist Specific Competencies .....	13
Section C Developing NMP Service Models .....	15
5 Models of Care: Oncology/ Haematology Clinics.....	16
Cancer Patient Pathway .....	16
NMP Review Clinics .....	16
Ward Based prescribing .....	17
Examples of Treatment/ Therapies NMPs prescribe .....	17
6 Practical Considerations for Developing for NMPs roles (frameworks) .....	18
7 Conclusions.....	19
8 References .....	19
Acknowledgements .....	19
Appendix One: Record of Oncology Haematology Competencies .....	20
Appendix Two Example Framework.....	23

# Guidance for Non Medical Review and Prescribing of Anticancer Medicines for Oncology and Haematology Patients

## **Executive Summary**

Pharmacists and nurses can undertake training to become Non-Medical Prescribers, NMP's. Oncology nurses and pharmacists have many opportunities to work alongside consultant oncologists and haematologists prescribing chemotherapy and supportive treatments for cancer therapy. The purpose of this document is to:

1. Describe the competencies that a Non-Medical Prescriber (NMP) must meet before prescribing SACT for cancer patients.
2. Give guidance for Trusts in the Northern Cancer Alliance (NCA) wishing to develop the roles of Oncology and Haematology Pharmacists and Nurse NMPs.

## **Competencies**

This document provides competencies that outline the knowledge and skills the pharmacist/nurse as a NMP must meet in addition to their prescribing qualification.

NCA believes it is important that NMPs are able to work to the same standards as medical prescribers. The competencies have been therefore been taken from the Clinical Oncology and Medical Oncology Curricula competencies for prescribing which are approved by the respective Royal Colleges.<sup>3,4,5</sup>

The competencies contain three levels:

### **Level One – Non Medical Review**

- Chemotherapy nurses or pharmacists undertaking mid-course treatment reviews of patients receiving SACT instead of a medical review in clinic should meet the level one competencies detailed in this document.

### **Level Two – Prescribing second cycle onwards**

- When starting as a prescriber in Oncology and Haematology NMPs should aim to achieve competency levels One and Two of this document first. Working at this level the NMP is able to prescribe SACT to continue a planned course of treatment but not initiate the first cycle of treatment.

### **Level Three – prescribing first cycle**

- The NMP is able to prescribe first cycle of treatment and initiate SACT within an agreed framework. The treatment decision on which SACT regimen to use must be made in conjunction with the responsible medical consultant (oncologist or haematologist).

## **NMP Roles**

Once NMPs have demonstrated competency in they should be able to work alongside oncology/ haematology consultants in a variety of roles including:

- Reviewing patients having chemotherapy and prescribing chemotherapy following initial treatment plan/ prescribing decision from their medical colleague
- Prescribing supportive medicines
- Amending, updating and initiating prescriptions at ward level.
- Running clinic's, e.g. oral TKI's in urology, myeloproliferative disorders (MPD)

This role can benefit medical prescribers by easing some of the burden of routine prescribing/ patient care and ensuring services are responsive to patient's needs. NMPs are not medically trained and are not seeking to replace the role of the doctor.

# Guidance for Non Medical Review and Prescribing of Anticancer Medicines for Oncology and Haematology Patients

## 1 *Background*

- 1.1 Nurses and pharmacists have been able to train and become independent prescribers for over a decade. Department of Health guidance states that NMPs can improve patient care without compromising patient safety by make it easier for patients to get the medicines they need and allowing more flexible team working across the NHS<sup>1</sup>.
- 1.2 The DH's working definition of independent prescribing is prescribing by a 'appropriate practitioner' (e.g. doctor, dentist, nurse, pharmacist) responsible and accountable for the assessment of patients with undiagnosed or diagnosed conditions and for decisions about the clinical management required.
- 1.3 This document covers pharmacist and nurses as only nurses and pharmacist can become independent prescribers. However it is recognised that other professions can become NMPs. Radiographers can become supplementary prescribers and there may be role within the NCA for radiographers to prescribe supportive medicines for cancer patients undergoing radiotherapy.
- 1.4 Pharmacists and Nurses have differing skills but both have a complimentary role in non-medical prescribing for cancer patients. This framework does not differentiate between pharmacists and nurses other than in the differences in retrospective professional competencies. Each profession can learn from each other when becoming NMPs and it is suggested that the Alliance Chemotherapy Group is used to form a support network for local NMPs and share learning and best practice.
- 1.5 Having a pharmacist/nurse initiating a prescription does not eliminate the requirement for a pharmacist's role in checking and validating the prescription and the nurse's role in administrating chemotherapy. NMPs must not be directly involved in checking/ administration of prescriptions they have written.

## 2 *Accountability*

- 2.1 All NMPs are personally accountable for their practice and must work to the same standards and competence that applies to medical prescribers. This will include use of electronic prescribing systems or in their absence pre-printed prescriptions and compliance with NHS England approved regimens. All health care professionals have a duty to their employers to use resources efficiently and effectively. Therefore the number and cost of items prescribed must be monitored and local formularies must be taken into account where they exist.
- 2.2 Nurse prescribers are individually professionally accountable to the Nursing and Midwifery Council (NMC) for this aspect of their practice, as for any other, and must act at all times in accordance with the NMC Code of Professional Conduct.
- 2.3 Pharmacist prescribers are individually professionally accountable to the General Pharmaceutical Council (GPC) and must act at all times in accordance with the GCP Code of Ethics and Standards.
- 2.4 All NMPs must identify and meet their individual continuing professional development needs via, for example, additional training, clinical supervision, clinical placements, reading and research.

## Guidance for Non Medical Review and Prescribing of Anticancer Medicines for Oncology and Haematology Patients

### 3 Prescribing Responsibilities

- 3.1 Once qualified an NMP independent prescriber can prescribe any licensed medicine (i.e. any product with a UK marketing authorisation) for any medical condition provided it falls within their area of competence. NMPs must ensure their practice complies with local organisational policies for use of unlicensed medicines and controlled drugs.
- 3.2 NMP's must ensure written consent for treatment has been obtained before prescribing a course of chemotherapy for the first time for a specific patient. The patient must have been provided with regimen specific patient information as part of the consent process.
- 3.3 All chemotherapy must be prescribed on the electronic prescribing system.
- 3.4 Blood counts and critical tests must be checked and authorised prior to administration, if these are not known to the NMP prescriber at time of prescribing, local Trust governance policy must detail who is responsible for authorising treatment to proceed after checking critical tests and blood counts. In practice the electronic system should be set up to ensure this happens.
- 3.5 NMP's are able to prescribe the first cycle of treatment and initiate SACT, however the treatment decision on which SACT regimen to use must be made in conjunction with the responsible medical consultant (oncologist or haematologist).
- 3.6 NMP's who prescribe the first cycle following treatment decision must ensure the following checks have been undertaken when prescribing the first cycle of chemotherapy<sup>2</sup>. This information must be documented on the clinic letter and/or medical notes detailing initial medical assessment of patient, including history.
  - a. history of specific diseases or conditions affecting fitness for chemotherapy.
  - b. performance status
  - c. prior history of chemotherapy
  - d. review of current patient's medication
  - e. that informed consent has been obtained
  - f. that a holistic assessment has been carried out.
- 3.7 NMP's may be asked to make treatment decisions and initiate treatment without being able to consult the patients' medical consultant, e.g. during holidays. In this circumstance the NMP must ensure that appropriate second opinion on their decision, e.g. local site specialist consultant is obtained and an approved treatment algorithm is being followed.
- 3.8 All NMPs now train as independent prescribers (IP), however there may still be NMP's who trained as supplementary prescribers. They will need to work in accordance with clinical management plans based upon chemotherapy regimens protocols and supportive care medicine guidelines and prescribe for 'named' individual patients under the supervision of the consultant. The framework should highlight if the prescriber is still working as a supplementary prescriber.
- 3.9 Note 'Chemotherapy refers to any systemic anti-cancer therapy, this includes monoclonal antibodies/targeted therapies, intravenous, subcutaneous, intrathecal and oral chemotherapy as well as topical treatments for bladder cancer.'<sup>3</sup> This guidance also covers the prescribing of immunotherapies and hormonal therapies that have a direct anti-cancer action.

# **Section B**

# **Competencies**

# Guidance for Non Medical Review and Prescribing of Anticancer Medicines for Oncology and Haematology Patients

## 4 NCA Competency Framework

### 4.1 Prescribing qualification competencies

As part of achieving the prescribing qualification NMPs have to demonstrate competency in a wide variety of areas e.g.

- Clinical and pharmaceutical knowledge
- Communicating with patients and consultation skills
- Clinical examination skills
- Safe prescribing
- Prescribing in context/ professionalism

### 4.2 Chemotherapy prescribing competency framework

In preparing competencies for NMP's the overriding principle is that NMP's should meet the same level of competencies as their medical colleagues. Doctors using the clinical and medical oncology competency frameworks gather and record evidence using an ePortfolio (a web-based tool that enables trainees to log all evidence). Competencies are demonstrated with workplace based assessment methods much as:

- Case-based discussion (CbD)
- mini-clinical evaluation exercise (mini-CEX)
- Multiple consultant report (MCR)
- Multi-source feedback (MSF)
- Patient survey (PS)

Nurse and Pharmacist NMP's **do not** have access to the same e-portfolio and **are not able** to employ the tools described above to demonstrate competency.

Therefore the demonstration of competencies below must be undertaken with an appropriate medical consultant with practice in the patient group the NMP prescribes for or should be addressed as part of appraisal/revalidation. For example case-based discussion (CbD) is likely to form the basis for much of the assessment.

### 4.3 Medical Royal Collage Competencies.

The 2016 RCR Clinical Oncology Syllabus<sup>3</sup> includes competencies that are relevant to non-medical prescribers across several sections in its introductory module and site specific learning outcomes. E.g.

Authorising chemotherapy	section 2.1, page 29
Prescribing chemotherapy	section 2.2, page 30
First line chemotherapy	section 4.8, page 45
Initiating Chemotherapy	section 4.10, page 46
Managing patients receiving chemotherapy	section 4.11, page 47
Initiating hormonal therapy	section 4.11, page 48
Managing patients receiving hormonal therapy	section 4.12, page 49
Assessing patients for biological therapies	section 4.14, page 50
Initiating biological therapies	section 4.16, page 51
Managing patients receiving biological therapies	section 4.17, page 51
Assessing patients for second and further lines of systemic therapy	section 4.38, page 63
Adjusting a chemotherapy regimen according to patient fitness	section 4.39, page 63

## Guidance for Non Medical Review and Prescribing of Anticancer Medicines for Oncology and Haematology Patients

The 2017 RCP Medical Oncology Syllabus<sup>4</sup> has a section on systemic anticancer therapies (SACT) which includes six levels of competence for prescribing chemotherapy

Summary of levels of competence	
Level	Summary description
	Foundation and Core Medical Training
0	Can recognise that a patient is receiving systemic cytotoxic or immunosuppressive therapy and alerts senior team members appropriately. No prescription can be undertaken
1	Can recognise important adverse effects of cytotoxic or immunosuppressive therapy and recognises that these agents may need to be stopped
	Specialty Training in Medical Oncology
2	Can undertake a review of a patient receiving systemic anticancer therapy and can authorise the next cycle of treatment to proceed. All prescription requires countersignature
3	Can continue a prescription for systemic anticancer therapy without countersignature but cannot prescribe the first cycle of systemic chemotherapy
4	Can initiate and prescribe systemic anticancer therapy for patients with a range of malignancies, while operating within local guidelines. Can demonstrate appropriate involvement of the patient and carers in decision-making regarding treatment
5	Can demonstrate competence at a level expected of a consultant and can make treatment decisions on all appropriate patients including those that fall outside of departmental guidelines by virtue of a rare tumour type or unique patient factors

Figure One Medical Oncology Competencies in Cytotoxic or Immunosuppressive therapy (Joint Royal Colleges of Physicians Training Board)<sup>4</sup>

The 2012 RCP Specialty Training Curriculum for Haematology<sup>5</sup> has a section on therapeutics and safe prescribing (C3) which is not specific to chemotherapy

Training programmes/competencies for clinical oncology and haematology specialities are structured differently to that of medical oncology but in general cover the same prescribing competencies for SACT/ Chemotherapy.

### 4.4 Adoption of Medical Competencies for NMPs

In adopting competencies for NMP's prescribing a step wise competency level framework based on the Medical Oncology model as above has been adopted.

This is ideal for nurse and pharmacist NMP's as it describes a clear progression of competency and progression of practice. The majority of competencies from levels 0 to 3 of the medical oncology framework and associated relevant competencies from the Clinical Oncology framework have been included in this framework.

Only those competencies that are directly relevant to NMPs are included as not all the competencies appropriate for doctors are appropriate for NMPs, and there are additional competencies that do not feature in the medical model.

## Guidance for Non Medical Review and Prescribing of Anticancer Medicines for Oncology and Haematology Patients

### 4.5 Competency Level 1 Reviewing Chemotherapy Patients

A practitioner working to level 1 is able to undertake a review of a patient receiving systemic therapy and can authorise the next cycle of treatment to proceed. This professional could be medically qualified or an appropriately trained chemotherapy nurse, oncology pharmacist or a professional allied to medicine.

These level 1 competencies form the basis for good practice for nursing and pharmacists who are not NMPs but are routinely involved in nurse/pharmacist lead review of mid cycle chemotherapy between medical reviews.

#### Level 1 NMP Competencies

Knowledge
Can define the range of systemic therapies utilised in the treatment of patients with cancer within the relevant clinical service
Can define the principles for dose delay or dose reduction of cytotoxic or immunosuppressive therapy
Can define the antiemetic requirements of patients receiving cytotoxic or immunosuppressive therapy
Can define the likely adverse effects of the cytotoxic or immunosuppressive therapy in common usage within the relevant clinical service
Can define appropriate pharmacological and non-pharmacological supportive measures that may be required by patients receiving SACT, including growth factors, antibiotic therapy and blood product support
Can recognise that it is safe to miss a dose of cytotoxic or immunosuppressive therapy
Demonstrates understanding of issues surrounding administration of intravenous therapies, e.g. principles of extravasation treatment.
Skills and Behaviour
Ability to perform a thorough assessment of toxicity and record the clinical information using defined systems such as the Common Toxicity Criteria.
Can review a prescription for SACT and accurately identify any errors or omissions
Can assess patient fitness to proceed with cytotoxic or immunosuppressive therapy
Can correctly and accurately authorise SACT treatment to proceed following assessment of the patient and relevant laboratory investigations

## Guidance for Non Medical Review and Prescribing of Anticancer Medicines for Oncology and Haematology Patients

### 4.6 Competency Level 2: Prescribing Second Cycle Onwards

A level 2 person is able to prescribe systemic therapy, within local guidelines, or to continue a planned course of treatment but not initiate the first course of treatment. This may include investigational agents in the context of a clinical trial. This professional is likely to be medically qualified or a nurse/ pharmacist NMP.

*Note:* To achieve level 2 must have achieved all of the competencies at levels 1.

#### Level 2 NMP Competencies

Knowledge
Can define the methods for calculating the correct dose of medication for administration including those based on body surface area, pharmacokinetic and pharmacodynamic principles
Can define the scientific basis and parameters for dose modifications to systemic therapy in the light of clinical data relating to the liver, renal, haematological and other organ systems.
Ability to prescribe antiemetic medications appropriate to the chosen therapy and ability to modify following review of the patient's situation and symptoms following previous treatments.
Ability to define the indications for and adverse reactions associated with the use of blood products and ability to make treatment decision following assessment of a patient's requirement.
Skills and Behaviour
Can prescribe appropriate pharmacological and non-pharmacological supportive measures that may be required by patients receiving SACT, including growth factors, antibiotic therapy and blood product support
Can prescribe and order SACT following assessment of the patient and relevant laboratory investigations
Can prescribe using local electronic prescribing systems.
Can accurately prescribe SACT using various methods for calculating the correct dose of medication for administration including those based on body surface area, pharmacokinetic and pharmacodynamic principles
Can implement a dose delay or dose reduction of systemic therapies, based upon haematological and non-haematological toxicity
Can manage an extravasation event, following local protocols and involvement of plastic surgeons as appropriate
Can determine that a patient may not be tolerating the treatment as expected and appropriately involves more senior colleagues in the review of the patient

This is equivalent to level 3 of the medical Oncology Competencies

## Guidance for Non Medical Review and Prescribing of Anticancer Medicines for Oncology and Haematology Patients

### 4.7 Competency level 3. Prescribing First Cycle

Working at this level the NMP is likely to be an advanced practitioner working as part of a multidisciplinary team with consultant oncologists and/or haematologists.

The NMP is able to prescribe first cycle of treatment and initiate SACT within an agreed framework. The treatment decision on which SACT regimen to use must be made in conjunction with the responsible medical consultant (oncologist or haematologist).

*Note:* To achieve level 3 must have achieved all of the competencies at levels 1,2.

#### Level 3 NMP Competencies

Knowledge
Can define the scientific mechanism of action of the SACT used in the management cancer patients and identify when this may interact with other prescribed drugs
Can define the requirement of Good Clinical Practice as it relates to clinical trials
Can define the long-term effects of SACT including the impact on fertility and risk of a secondary malignancy
Skills and Behaviour
Can initiate SACT for specific named malignancies following initial assessment of patient by medical consultant, considering the decisions made during a multidisciplinary team meeting and following an agreed treatment algorithm
Can modify the dosage of SACT based on pharmacokinetic and pharmacodynamic information relating to a patient
Can modify the dosage of SACT based upon the co-morbidity of the patient and other factors such as the age of the patient
Can institute appropriate dose modifications of SACT based upon clinical data that relates to organ dysfunction and other biochemical parameters
Can perform a thorough assessment of SACT toxicity and report adverse events to appropriate regulatory authorities
Can assess objective tumour response by clinical, serological and radiological parameters
Can obtain informed consent for SACT following appropriate discussion of indications and likely adverse effects of treatment
Can appropriately request assistance or advice when a situation requires the involvement of a more senior colleague

## **Guidance for Non Medical Review and Prescribing of Anticancer Medicines for Oncology and Haematology Patients**

This is equivalent to level 4 of the medical Oncology Competencies

## Guidance for Non Medical Review and Prescribing of Anticancer Medicines for Oncology and Haematology Patients

### 4.8 *Pharmacist Specific Competencies*

- 4.8.1 It is recognised that oncology pharmacists may well have a differing degree of experience and training. An oncology pharmacist is traditionally a title that is given to a job rather than by a route of credentialing and/or demonstration of educational competency.
- 4.8.2 There is now a route to credentialing as a specialist oncology pharmacist. BOPA working in partnership the Royal Pharmaceutical Society (RPS) developed the Cancer Care Expert Professional Practice Curriculum for the RPS faculty<sup>6</sup>. This curriculum provides an overview of the knowledge, skills, experiences and behaviours required to practice at advanced level in Cancer Care at three stages: Advanced Stage I, Advanced Stage II and Mastery, in line with the requirements of the RPS Advanced Pharmacy Framework. By completing a portfolio of evidence mapped against the frameworks, pharmacists can apply for credentialing as a specialist with the RPS Faculty.
- 4.8.3 There is also a higher education route through which pharmacists are able to study and achieve postgraduate qualifications in oncology.
- 4.8.4 We suggest that any pharmacist who is working as a NMP in oncology or haemato-oncology and prescribing systemic anticancer therapies should meet the following requirements and competencies:
- . Be working at Agenda for Change Band 8a or above (or band 7 under supervision of more senior prescribing pharmacist)
  - Ideally has achieved membership of the RPS Faculty, at least Stage I by submitting a portfolio of evidence of their practice using the Cancer Care Expert Professional Practice Curriculum to illustrate their expert professional practice.
  - It is recommended that all practicing oncology pharmacists nurses and in particular those who are NMP's are members of the BOPA British Oncology Pharmacist Association to provide a network of support as well as a mechanism to share good practice at a national level
  - If operating at level three competency ideally has (or studying for) a post graduate qualification in oncology / haematology at MSc level.
- 4.8.5 Employers should require that all pharmacists working as prescribers in oncology should work towards having a portfolio submitted to the RPS faculty for specialist credentialing and demonstrate their competence and continuing professional education in this area by on-going membership of the Faculty. It is recognised that there will be many pharmacists who have undertaken the prescribing qualification who do not have a post graduate qualification in oncology and currently are not members of the RPS Faculty.
- 4.8.6 It is suggested that these pharmacists should, if they are already working as NMPs, have demonstrated competency through their prescribing course and be signed off by the consultant who was their mentor during the prescribing training. They should demonstrate continuing competency as an oncology pharmacist by undertaking an assessment of their practice against the competencies included in this document. Ideally this assessment should be peer reviewed.

## **Guidance for Non Medical Review and Prescribing of Anticancer Medicines for Oncology and Haematology Patients**

### **4.9 Specific Nurse Competencies**

4.9.1 Nursing staff have to successfully complete the Alliance agreed qualification before they are deemed competent to administer chemotherapy and systemic anticancer therapies i.e. the Chemotherapy Modules delivered by Northumbria, Teesside and Cumbria Universities. As well as the prescribing qualification nurses must be senior experienced chemotherapy nurses working at Agenda for Change Band 7 or above before commencing NMP training in oncology/haematology.

4.9.2 Therefore, within the NCA we suggest that any Nurse who is working as a non-medical prescriber in oncology prescribing systemic anticancer therapies should meet the following requirements and competencies.

- 1 Be working as and have achieved competency as a Nurse Practitioner, Clinical Nurse Specialists or Nurse Consultant in Oncology/Haematology.
- 2 Working at 'Advanced Practice' / 'Expert' Level as demonstrated by assessment against the NCA 'Chemotherapy Competency Framework'.
- 3 It is recommended that all practicing chemotherapy nurses and in particular those who are NMP's are members of the UKONS Chemotherapy Nurses Forum to provide a network of support as well as a mechanism to share good practice at a national level.
- 4 If operating at level three competency ideally has (or studying for) a post graduate qualification in oncology / haematology at MSc level.

### **4.10 Limits of Competency**

4.10.1 A key feature of the competencies is the ability for the NMP to recognise the limits of their ability. NMP's are not medically qualified and are not seeking to replace/ take over Doctors roles, but to work as part of a team delivering care to cancer patients. NMP's have a professional responsibility to use their judgements and seek medical

4.10.2 NMP's must have a clear pathway to refer patients 'back' to the medical consultant for urgent medical review.

# **Section C**

  

## **Developing NMP Service Models**

# Guidance for Non Medical Review and Prescribing of Anticancer Medicines for Oncology and Haematology Patients

## 5 *Models of Care: Oncology/ Haematology Clinics*

An understanding of the medical model of reviewing patients undertaking chemotherapy and the local chemotherapy pathway is useful to see where NMPs can contribute

### ***Cancer Patient Pathway***

- 5.1 The model within the NCA is for common solid tumours to be treated in the Trusts as day case chemotherapy, this includes breast, colorectal, lung, some upper GI, some urology including renal, prostate and gynaecological cancers.
- 5.2 Rarer cancers and those regimens requiring inpatient stay are treated in the cancer centres at Newcastle Hospitals, South Tees Hospitals and North Cumbria
- 5.3 Haematology services are divided into different service levels, with outpatient chemotherapy in level 1/2 services and complex inpatient chemotherapy treated at level 3 /4 centres.
- 5.4 The majority of cancer treatment follows a clinical model based upon initial review at a Multidisciplinary Team Meeting, MDT where the patient's case is discussed. The MDT usually consists of Pathologists, Surgeons, Physicians, Oncologists, Nurse Specialists and Physiotherapists etc. as appropriate. NMPs do not routinely participate in weekly MDT meetings; however as NMPs their attendance could be valuable.
- 5.5 At the MDT the patients initial treatment plan will be decided, typically if this is a common cancer such as breast or colorectal the patient will be having surgery and/or radiotherapy and then at some point be deemed suitable for chemotherapy. Once it has been determined that the chemotherapy is preferred treatment option the patient is booked in to an oncology or haematology outpatient clinic.
- 5.6 At the initial appointment the medical consultant will discuss the patient's diagnosis and potential treatment plan with chemotherapy/systemic anticancer medicines, give the patient time to consider the options and then consent for treatment (which may be on a subsequent appointment). These are coded as 'new appointments' and are the responsibility of the medical consultant.

### ***NMP Review Clinics***

- 5.7 After initial appointment patients return to clinic for 'follow up'/'review' appointments. The frequency of review will vary depending on the both the preferences individual consultant and set up of chemotherapy nurse service.
- 5.8 NMPS have a potential role in managing increasing demand in oncology clinics by taking on a caseload of follow up/review appointments..
- 5.9 There is also potential for the NMP to take on case load of patients with long term medication for haematology patients, e.g. hydroxycarbamide for patients with myeloproliferative disorders (MPD).
- 5.10 Clinic models can either be working in clincia alongside medical consultant, allowing the NMPs share the clinics 'routine' workload with the consultant at hand to refer to/ discuss management as appropriate.
- 5.11 Alternatively NMPs may manage their own caseload in a dedicated separate clinic with no consultant present in clinic/ to work alongside the NMP.

## **Guidance for Non Medical Review and Prescribing of Anticancer Medicines for Oncology and Haematology Patients**

### ***Ward Based prescribing***

- 5.12 NMPs can have a role in day to day prescribing of chemotherapy between clinic reviews that is 'signing prescriptions' to help support the consultant workload , ensure adequate time is available to ensure chemotherapy prepared and patients receive treatment in timely fashion.
- 5.13 Prescribing supportive care on the oncology day unit or prescribing on in-patient wards can be done on a more routine day to day basis without supervision of a consultant provided there is an agreed framework that covers the NMP's role.

### ***Examples of Treatment/ Therapies NMPs prescribe***

- 5.14 There is potentially greater demand for NMPs to prescribe for patients with common cancers receiving adjuvant chemotherapy due to the higher volume of adjuvant chemotherapy prescribed. However, depending on the experience of the NMP they can also undertake management of patients diagnosed with advanced cancers
- 5.15 Oncology/ Haematology Clinical Nurses Specialists/Nurse Consultants will have significant experience within their own particular patient/ tumour site sub group and should therefore seek to start/ initially restrict their prescribing to this area, e.g. oncology lung nurse specialists. In addition some oncology pharmacists have significant experience of one patient group and may wish to initially restrict their prescribing to this area. Some NMP's may prescribe for more than one tumour site depending on their knowledge and skills relating to these tumour groups, however their prescribing will be in line with approved care pathways.
- 5.16 Other examples of areas for NMP prescribing include:
- IV anticancer medicines as part of review and authorization of treatment
  - Herceptin (trastuzumab) for early breast cancer, NMPs can take responsibility for managing the prescribing for these patient's reviewing their echocardiograms and blood results every three months and authorizing on-going prescriptions.
  - Oral anticancer medicines, e.g. capecitabine, pharmacists and nurses are increasingly involved in the review of these medicines and assessing suitability for continuation with therapy.
  - Urology oncology clinics have increasing capacity pressures due to expansion of eligible patient population for abiraterone and enzalutamide so there is a role for NMPs to support these clinics and ease medical capacity.
  - Prescribing supportive care items that are not available under patient group directions (PGDs) for example varying courses of antiemetics and other medications to treat the side effects of the chemotherapy treatment, or their underlying disease. Using NMP's to prescribe supportive care results in much greater flexibility than using PGDs.

## Guidance for Non Medical Review and Prescribing of Anticancer Medicines for Oncology and Haematology Patients

### 6 *Practical Considerations for Developing for NMPs roles (frameworks)*

- 6.1 It is recognised that NMPs do not have a medical qualification so when setting up a NMPs service(s) a framework or local clinical guideline that describes exactly what responsibilities the NMPs will have during their clinical practice can be very useful. See appendix two for a framework template.
- 6.2 A framework/guideline can define what the NMP will and will not do (avoiding unfunded service creep) and also give criteria about referring back to the medical consultant. A medical consultant, ideally the patient's consultant, must always be available for medical advice when NMPs are consulting with patients, this can be via phone or in person.
- 6.3 In developing a framework/clinical guideline the NMP should involve and seek the views of the doctor(s) they will be working alongside with and ensure it has appropriate governance approval e.g. the local Trust Chemotherapy Group or Medicines Committee. The framework/ guideline can be used to support a business case for developing the NMP role.
- 6.4 Workforce issues must be dealt with at a local Trust level once the need/benefits of an NMP have been established. When developing the role of the NMP the key questions for a Trust to address are
- The need for the pharmacist/nurse to work as a NMP with cancer patients
  - The advantages to the Trust of having a pharmacist/ nurse working as a NMP with cancer patients
  - Arrangements for 'backfill' of the nurse/pharmacist role when they are working as NMPs.
- 6.5 **Note:** It is recognised that there are advanced practitioner NMPs working in NCA who have already developed services without a guideline/framework.

# Guidance for Non Medical Review and Prescribing of Anticancer Medicines for Oncology and Haematology Patients

## 7 Conclusions

The NCA Chemotherapy Group undertake to provide a supportive forum for the discussion and planning of the development of the role of NMP in the Cancer Alliance. It is recognised that this document is not exhaustive but covers the general principles that NMPs should meet the same competencies for prescribing anticancer medicines that specialist medical trainees being trained are expected to meet and that best practice is for a framework document or clinical guideline describing the scope of practice of the NMP to be prepared.

## 8 References

1. Improving patients' access to medicines: A guide to implementing nurse and pharmacist independent prescribing within the NHS in England. Department of Health 12 April 2006
2. Chemotherapy Peer Review Measures. NHS England Quality Surveillance Programme Available at <https://www.qst.england.nhs.uk/> (restricted access) 'Chemotherapy definition' NHS Standard Contract For Cancer:
3. Chemotherapy (Adult) - Service Specifications. NHS England. Available at <https://www.england.nhs.uk/wp-content/uploads/2013/06/b15-cancr-chemoth.pdf> last accessed 16.01.18
4. Speciality Training Curriculum Clinical Oncology. Royal College of Radiologists, Faculty of Clinical Oncology. 12 December 2016. Available at [https://www.rcr.ac.uk/sites/default/files/2016\\_curriculum\\_-\\_clinical\\_oncology\\_15\\_november\\_2016.pdf](https://www.rcr.ac.uk/sites/default/files/2016_curriculum_-_clinical_oncology_15_november_2016.pdf) last accessed 30.01.2018
5. Specialty Training Curriculum for Medical Oncology: Joint Royal Colleges of Physicians Training Board: August 2017: Available at <http://www.jrcptb.org.uk/specialties/medical-oncology> last accessed 30.01.2018.
6. Specialty Training Curriculum for Haematology Joint Royal Colleges of Physicians Training Board: August 2012: Available at <https://www.jrcptb.org.uk/specialties/haematology> last accessed July 2018.
7. Royal Pharmaceutical Society Cancer Care Expert Professional Practice Curriculum, 2014. Available at <http://www.rpharms.com/faculty/faculty-resources.asp> last accessed 29.11.14

## Acknowledgements

Dr Graham Dark, Consultant Medical Oncologist, NCCC

## Guidance for Non Medical Review and Prescribing of Anticancer Medicines for Oncology and Haematology Patients

### *Appendix One: Record of Oncology Haematology Competencies*

Name \_\_\_\_\_ Job Title \_\_\_\_\_

Competency level 1 (Review and Authorise Administration of Systemic Anticancer therapy)	Supporting Statement / List of Evidence	Date Achieved	NMPs Signature
Can define the range of systemic therapies utilised in the treatment of patients with cancer within the relevant clinical service			
Can define the principles for dose delay or dose reduction of cytotoxic or immunosuppressive therapy			
Can define the antiemetic requirements of patients receiving cytotoxic or immunosuppressive therapy			
Can define the likely adverse effects of cytotoxic or immunosuppressive therapy in common usage within the relevant clinical service			
Can define appropriate pharmacological and non-pharmacological supportive measures that may be required by patients receiving SACT, including growth factors, antibiotic therapy and blood product support			
Recognises when it is safe to miss a dose of cytotoxic or immunosuppressive therapy			
Demonstrates understanding of issues surrounding administration of intravenous therapies, e.g. principles of extravasation treatment.			
Able to perform a thorough assessment of toxicity and record the clinical information using defined systems such as the Common Toxicity Criteria.			
Can review a prescription for SACT and accurately identify any errors /omissions			
Can assess patient fitness to proceed with cytotoxic or immunosuppressive therapy			
Can correctly and accurately authorise SACT treatment to proceed following assessment of the patient and relevant laboratory investigations			

**NMP Signature:** ..... **Date:** .....

**Approved by :**  
**(Oncologist / Haematologist)**..... **Date:** .....

## Guidance for Non Medical Review and Prescribing of Anticancer Medicines for Oncology and Haematology Patients

Name \_\_\_\_\_ Job Title \_\_\_\_\_

Competency level 2 (Prescribe Systemic Anticancer therapy - 2 <sup>nd</sup> cycle onwards )	Supporting Statement / List of Evidence	Date Achieved	NMPs Signature
Can define the methods for calculating the correct dose of medication for administration including those based on body surface area, pharmacokinetic and pharmacodynamic principles			
Can define the scientific basis and parameters for dose modifications to systemic therapy in the light of clinical data relating to the haematological, liver, renal and other organ systems.			
Ability to prescribe antiemetic medications appropriate to the chosen therapy and ability to modify following review of the patient's situation and symptoms following treatment.			
Ability to define the indications for and adverse reactions associated with the use of blood products and ability to make treatment decision following assessment of a patient's requirement.			
Can prescribe appropriate pharmacological and non-pharmacological supportive measures that may be required by patients receiving SACT, including growth factors, antibiotic therapy and blood product support			
Can prescribe and order SACT following assessment of the patient and relevant laboratory investigations			
Can prescribe using local electronic prescribing systems.			
Can accurately prescribe SACT using various methods for calculating the correct dose of medication for administration including BSA, pharmacokinetic and pharmacodynamic principles			
Can implement a dose delay or dose reduction of systemic therapies, based upon haematological and non-haematological toxicity			
Can manage an extravasation event, following local protocols and involvement of plastic surgeons as appropriate			

**NMP Signature:** ..... **Date:** .....

**Approved by:(Oncologist / Haematologist)**..... **Date:** .....

## Guidance for Non Medical Review and Prescribing of Anticancer Medicines for Oncology and Haematology Patients

Name \_\_\_\_\_ Job Title \_\_\_\_\_

<b>Competency level 3</b> (able to prescribe first cycle of treatment can initiate SACT for patients for specific named malignancies following agreed algorithm)	<b>Supporting Statement / List of Evidence</b>	<b>Date Achieved</b>	<b>NMPs Signature</b>
Can define the scientific mechanism of action of the SACT used in the management cancer patients and identify when this may interact with other prescribed drugs			
Can define the requirement of Good Clinical Practice as it relates to clinical trials			
Can define the long-term effects of SACT including the impact on fertility and risk of a secondary malignancy			
Can initiate SACT for specific named malignancies following initial assessment of patient by medical consultant, considering the decisions made during a multidisciplinary team meeting and following an agreed treatment algorithm			
Can modify the dosage of SACT based on pharmacokinetic and pharmacodynamic information relating to a patient			
Can modify the dosage of SACT based upon the co-morbidity of the patient and other factors such as the age of the patient			
Can institute appropriate dose modifications of SACT based upon clinical data that relates to organ dysfunction and other biochemical parameters			
Can perform a thorough assessment of SACT toxicity and report adverse events to appropriate regulatory authorities			
Can assess objective tumour response by clinical, serological and radiological parameters and appropriately involve more senior medical colleagues in the confirmation of response as required.			
Can obtain informed consent for SACT following appropriate discussion of indications and likely adverse effects of treatment (in conjunction with medical consultant as part of an agreed pathway)			
Can appropriately request assistance or advice when a situation requires the involvement of a more senior colleague			

**NMP Signature:** ..... **Date:** .....

**Approved by:(Oncologist / Haematologist)**..... **Date:** .....

# Guidance for Non Medical Review and Prescribing of Anticancer Medicines for Oncology and Haematology Patients

## *Appendix Two Example Framework*

### Example Framework/ Clinical Guideline Template for Chemotherapy Non-Medical Prescriber Clinics

#### **Background**

Describe the background to the clinic

#### **Aims**

What are the aims of the service?

#### **Resources**

Describe the resources in place to run the clinic, e.g. rooms, staffing, etc.

#### **Timescales**

Stipulate if the clinic is time limited

#### **Clinical Group**

List inclusion / exclusion criteria for patients to be seen in clinic

#### **Patient Pathway & Responsibilities**

Consider

- Doctors responsibilities
- Pharmacist NMPs responsibilities
- Describe who will prescribe and what they will prescribe
- Reporting of adverse reactions:
- Frequency of review:
- Describe any specific circumstances where patients may require referral

#### **Training & Competence**

Describe necessary competences - refer to framework

Consider

- Patient assessment
- Holistic care
- Prevention and management of side effects
- Chemotherapy administration techniques
- Supplementary prescribing
- Communication

#### **Documentation**

Describe what shared notes are used, how the NMP will communicate i.e. dictating clinic letters and what the arrangements for administrative support.

#### **Audit & Review of Clinic Outcomes**

Describe arrangements for audit of clinics where appropriate

#### **Document Approval**

Agreed By: Oncologist / Haematologist  
Trust Chemotherapy Group