



**British Oncology Pharmacy Association**

**ONCOLOGY/HAEMATOLOGY PHARMACY  
NON-MEDICAL PRESCRIBING GUIDELINES**

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### 1 Executive Summary

Pharmacists and nurses can undertake training to become Non Medical Prescribers, NMP's. The purpose of this document is to:

1. Describe the competencies that a Non-Medical Prescriber (NMP) must meet before prescribing SACT Systemic Anti-cancer Therapies for cancer patients.
2. Introduce the roles Oncology and Haematology Pharmacists NMPs can have. BOPA will be producing a strategy for the development of NMP roles in the near future.

#### **Competencies**

The British Oncology Pharmacy Association (BOPA) 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>

This document provides competencies that outline the knowledge and skills the pharmacist as a NMP must meet in addition to their prescribing qualification. The competencies contain three levels:

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

- Chemotherapy 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 reviewing and prescribing they should have many opportunities to work alongside oncology/ haematology consultants prescribing chemotherapy and supportive treatments for cancer therapy in a variety of roles

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.

### 2 Definitions

For the purposes of this document the term 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>1</sup>. This guidance also covers the prescribing of immunotherapies and hormonal therapies that have a direct anti-cancer action.

### 3 Background

- 3.1 Nurses and pharmacists have been able to train and become independent prescribers for over a decade<sup>1</sup>. Department of Health guidance states that NMPs can improve patient care without compromising patient safety by making it easier for patients to get the medicines they need and allowing more flexible team working across the NHS.
- 3.2 It is also recognised that other professions can become NMPs, for example radiographers can become supplementary prescribers and there may be role for radiographers to prescribe supportive medicines for cancer patients undergoing radiotherapy. Nurses can also become NMPs and the principles in this document could easily apply to nursing, however this document applies to pharmacists only.
- 3.3 The DH's working definition of independent prescribing is prescribing by an '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.

### 4 Accountability

- 4.1 Having a pharmacist initiating a prescription does not eliminate the requirement for a (second) pharmacist's role in checking and validating the prescription. NMPs must not be directly involved in checking or dispensing of prescriptions they have written.
- 4.2 The Royal Pharmaceutical Society (RPS) state that NMPs must 'ensure separation of prescribing and dispensing whenever possible. Where a pharmacist is both prescribing and dispensing a patient's medication, a second suitably competent person should normally be involved in the checking process.'
- 4.3 All non-medical prescribers are personally accountable for their practice and must work to the same standards and level of competence that applies to medical prescribers. This includes the requirement to use electronic prescribing systems or pre-printed prescriptions in the absence of electronic systems. Prescribing should be compliant with local (England, Scotland Wales and NI) NHS approved regimens and treatment algorithms.

- 4.4 As prescribers, 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.
- 4.5 Pharmacist prescribers are individually professionally accountable to the General Pharmaceutical Council (GPhC) and must act at all times in accordance with the GPhC Code of Ethics and Standards.
- 4.6 In order to exercise accountability and duty of care, all NMPs must identify and meet their individual continuing professional development (CPD) needs via, for example, additional training, clinical supervision, clinical placements, reading and research.
- 4.7 It is a condition of registration with the GPhC that all pharmacists must have a professional indemnity arrangement that covers the scope of their practice. Therefore any activity undertaken as an NMP must be covered by appropriate indemnity arrangement. Pharmacists working for the NHS, will already have an appropriate indemnity arrangement if prescribing is part of their job role as the NHS insures its employees for work carried out on its behalf. It is the responsibility of the individual NMP to ensure that they are covered appropriately by their employer or by Personal Indemnity Insurance.

### 5 Prescribing Responsibilities

- 5.1 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.
- 5.2 NMPs 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.
- 5.3 Blood counts and critical tests must be checked and authorised prior to administration, if these are not available to the NMP prescriber at time of prescribing, local organisational 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.
- 5.4 NMPs 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).

- 5.5 NMPs 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 of specific diseases /conditions affecting fitness for chemotherapy.
  - performance status
  - prior history of chemotherapy
  - review of patient's current medication
  - that informed consent has been obtained
  - that a holistic assessment has been carried out.
- 5.6 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 algorithms are being followed.
- 5.7 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.

### 6 Competencies Framework Oncology Pharmacist NMPs

#### 6.1 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

#### 6.2 Chemotherapy prescribing competency framework

In preparing competencies for pharmacist NMPs the overriding principle is that pharmacist NMPs 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 such as:

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

Pharmacist NMP's **do not** have access to an 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 could be addressed as part of appraisal/revalidation. Case-based discussion (CbD) is likely to form the basis for much of the assessment.

#### 6.3 Adoption of Medical Competencies for NMPS

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

This is ideal for pharmacist NMPs 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 frameworks 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.

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.

### 6.4 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

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



### 6.5 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 pharmacists who are not NMPs but are routinely involved in pharmacist lead review of mid cycle chemotherapy between medical reviews.

#### *NMP Level 1 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

\*Note these competencies are taken from medical Oncology levels 0,1,2

### 6.6 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.

#### *NMP Level 2 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

### 6.7 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.

#### **NMP Level 3 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 and appropriately involve 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

### 6.8 Pharmacist specific competencies

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.

There is now a route to credentialing as a specialist oncology pharmacist. BOPA worked in partnership the Royal Pharmaceutical Society (RPS) to developed the Cancer Care Expert Professional Practice Curriculum for the RPS faculty<sup>5</sup>. The 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.

There is also a higher education route through which pharmacists are able to study and achieve postgraduate qualifications in oncology.

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.

1. Be working at Agenda for Change Band 8a or above (or band 7 under supervision of more senior prescribing pharmacist)
2. 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.
3. 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.
4. If operating at level three competency ideally has (or studying for) a post graduate qualification in oncology / haematology at MSc level.

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. 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. It is expected that they should undertake a commitment to prepare a portfolio of evidence.

### 7 Conclusions

- There are many opportunities for oncology pharmacists to work as NMP's as part of the wider cancer team
- NMPs should meet the same competencies for prescribing anticancer medicines that cancer specialist medical trainees are expected to meet.
- Best practice is for NMP's to prepare framework or clinical guidelines describing the scope of their practice.

### 8 References

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2. 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
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5. 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.

## BOPA Non-Medical Prescribing (NMP) and Review Guidelines

### 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:** .....

## BOPA Non-Medical Prescribing (NMP) and Review Guidelines

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:** .....

## BOPA Non-Medical Prescribing (NMP) and Review Guidelines

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

Competency level 3 (able to prescribe first cycle of treatment can initiate SACT for patients for specific named malignancies following agreed algorithm)	Supporting Statement / List of Evidence	Date Achieved	NMPs Signature
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:** .....



### Appendix TWO Models of Care for Pharmacist NMPs

The British Oncology Pharmacy Association (BOPA) supports the on-going work and further development of pharmacists and nurses as non-medical prescribers (NMPs) working as part of the cancer services team. There are many examples of potential models for pharmacist to work as NMPs, This appendix gives an overview of common models, BOPA will seek to publish a toolkit to support the growth of NMPs.

#### Oncology / Haematology Out-Patient Clinic Models

Summary: Pharmacist works in out-patient clinic reviewing patients and prescribing chemotherapy either alongside medical consultant or as an independent clinic. The pharmacist can have their own patient list or work from consultant's patient list.

In this model pharmacists work alongside their medical colleagues, the consultant and NMP will agree the appropriate patients to be managed by the NMP. There are two models potential variation.

#### Joint clinic:

The patients will be seen by pharmacist in clinic running alongside the existing consultant clinic. This could include the majority of adjuvant patients for instance for breast cancer and include some treatments in advanced disease. The pharmacist and consultant will agree who see's which patients, this can be informal on the day by reviewing the list or more formally e.g. consultant sees new patients NMP's do mid cycle chemotherapy reviews.

This model is similar to how consultant works with their specialist trainees, the pharmacist in this model needs to agree if they have will their own clinic code so the activity for patients they see is attributed to them. This can be important for monitoring activity and demonstrating benefit. The model also means the NMP can share the existing clinic nurse resource and the consultant's secretarial support.

#### Independent clinic:

The pharmacist sets up their own clinic which runs independently and consultant refers / hands over patients to this clinic for long term management. This works well for longer term conditions such as myeloproliferative disorders (MPD). In this model the pharmacist NMP will need to have their own clinic code and will need clinic nurse support, support from reception staff and secretarial support to process clinic letters. If the NMP does not have their own secretary it is good idea to seek support from the medical secretaries that support the consultant(s) who refer patients.

#### Deciding which model to adopt

The structure of oncology/haematology clinics will vary dependent on the skills of the professionals performing the clinics and local service requirements. For both models a medical consultant, ideally the patient's consultant, must always be available for medical advice when NMPs are seeing patients, i.e. physically or by telephone.

### Ward Based Prescribing

Prescribing supportive care on an oncology day ward or prescribing on in-patient wards can be done on a more routine day to day basis without supervision of a consultant provided the NMP is working within their own competency.

NMPs can also have a role in day to day prescribing of chemotherapy between clinic reviews, that is 'signing prescriptions' to help support the consultant workload and ensure adequate time is available for service to ensure chemotherapy prepared.

### Non Prescribing Clinic Role

Finally there is also a role for pharmacists working in clinics, reviewing chemotherapy prescriptions and counselling patients without prescribing, e.g. where there is sufficient prescribing capacity. This can be advantageous to proactively managing chemotherapy verification workload and supporting patients counselling.

### Examples of Treatment/ Therapies NMPs prescribe

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

Oncology/ Haematology pharmacists may 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.

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.

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

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 three below for a framework template.

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.

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 Organisation Chemotherapy Group or Medicines Committee. The framework/ guideline can be used to support a business case for developing the NMP role.

Workforce issues must be dealt with at a local Organisation level once the need/benefits of an NMP have been established. When developing the role of the NMP the key questions for an Organisation to address are

- The need for the pharmacist/nurse to work as a NMP with cancer patients
- The advantages to the Organisation 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.

### Appendix THREE: Framework Template for NMP Clinics/Services

#### **Background**

Describe the background to the clinic /service

#### **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  
Organisation Chemotherapy Group

## BOPA Non-Medical Prescribing (NMP) and Review Guidelines

### Document Control

<b>Title</b>	ONCOLOGY PHARMACY NON MEDICAL PRESCRIBING GUIDELINES		
<b>Author / Editor</b>	Steve Williamson, Consultant Cancer Pharmacist Northumbria HCFT/ NHS England		
<b>Owner</b>	BOPA & RPS		
<b>Change History</b>			
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1.1	27.3.09	Steve Williamson	
1.2	18.5.09	Steve Williamson	Updated following circulation to FCP / BOPA committee members.
1.3	26.06.09	Steve Williamson	Updated following BOPA consultation
1.4	06.09.11	Steve Williamson	Review and update of 1 <sup>st</sup> cycle Rxing section 9.1 and updated references to professional bodies
2.0	25.11.14	Steve Williamson	Updated and revised, general updates including sections on ward based prescribing, updated education/ competencies requirements
2.1	23.06.15	Steve Williamson	Updated following comments from consultation with BOPA committee review panel.
2.2	20.12.16	Steve Williamson	Corrected formatting for upload to site
3.0	17.01.18	Steve Williamson	Updated all competencies in section 10 to reflect new 2017 medical oncology training model. Added detail to section 7.
3.1	15.03.18	Steve Williamson	Added reference to Clinical Oncology competencies
4.0	16.07.18	Steve Williamson	Reformatted removed sections 6,7,8,9 condensed to key points in appendix two
4.1	25.08.18	Steve Williamson	Finalised after discussion at Exec
<b>Contributors</b>		<b>Section/Contribution</b>	
Calum Polwart		General comments, framework	
NECN Chemo Group		General comments, models of care	
Dr Graham Dark, Consultant Medical Oncologist, NCCC		Competencies and medical advice	
Bruce Burnett, Helen Flint , Ann Hines and Tim Root		General comments, grammar and clarification of detail.	
SCAN ( via Ewan Morrison), POP via Julie Mycroft, BOPA membership, Sue Marsh		General comments, clarification and additional detail.	
Jennifer Allen		General Comments and Editing	

### **Information Reader Box**

<b>Proposed Target Audience</b>	Oncology and Haematology Pharmacists, Provider Organisation Chief Pharmacists, Clinicians supporting pharmacist NMPs, PCT Prescribing Advisors,
<b>Proposed Circulation List</b>	BOPA Members, RSPGB, DH Chief Pharmaceutical Officer, UKONS committees, RCR Clinical Oncology Sub Committee, RCP Medical Oncology and haematology Sub committees, Provider Trust Chief Pharmacists, Heath Board Chief Pharmacists, CCG prescribing Advisors, NHS England Area Team Pharmacists, Chemotherapy CRG, Heads of Schools Pharmacy .
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