

New standards for chemotherapy verification

Last month, the British Oncology Pharmacy Association published a set of standards for clinical pharmacist checking of anticancer medicine prescriptions. In this article, Steve Williamson describes the background to the development of the standards and what they mean for clinical pharmacists.

For pharmacists, checking prescriptions for systemic anticancer therapies (SACTs) is more complex than checking prescriptions for most other medicines. SACTs include traditional cytotoxic medicines (such as doxorubicin and carboplatin), and newer non-cytotoxic medicines (such as targeted therapies and antibody treatments, e.g. sunitinib, rituximab and lenalidomide).

It has long been recognised that SACTs are high-risk medicines, which are often prescribed as part of complex regimens.

Some of the newer targeted therapies do not display all of the toxicities traditionally seen with cytotoxic drugs, however, they are still potentially toxic and need careful prescribing.

Furthermore, the pharmacists' traditional source of information for medicines dosage, the British National Formulary, is often not appropriate for SACTs because it does not provide information on dose regimens. Access to drug regimen protocols is needed, along with an understanding of the additional supportive care needs of patients on anticancer medicines.

BOPA standards

Last month, the British Oncology Pharmacy Association (BOPA) published standards for clinical pharmacy verification of prescriptions for anticancer medicines. The

Background

Cancer services have been under the spotlight in recent years, with the health departments in England and Scotland recognising the vital role of oncology-trained pharmacists in checking all prescriptions for chemotherapy.^{3,4} This has prompted clinical pharmacists to consider what it means to be an oncology-trained pharmacist and what must be done when checking chemotherapy prescriptions.

new document brings together established clinical pharmacy practice and present it in the form of standards.¹ It describes the key steps a pharmacist must take when checking prescriptions for anticancer medicines. These steps are listed in Panel 1 (p42).

Scope The standards cover SACTs and are primarily aimed at oncology pharmacists and haematology pharmacists in secondary care. However, it is recognised that anticancer medicines are also used for non-cancer indications, such as methotrexate for rheumatoid arthritis. These pose similar risks to the patient but fall outside the scope of the standards document. Pharmacists using SACTs for non-cancer indications or those using other high-risk medicines can still take the standards into account, if appropriate.

If oral chemotherapy services move into the community in the future, the standards will also apply in that setting.

Although the BOPA standards are written by 'specialist' oncology pharmacists, they can be used by all clinical pharmacists who have appropriate knowledge and training, since SACTs are one of many groups of high-risk medicines that pharmacists have to deal with.

Consultation

BOPA undertook extensive consultation on the verification standards with its members, who represent the bulk of clinical pharmacists and technicians working in oncology and haematology. Many BOPA members engaged with and contributed to the shaping of the final standards.

Some key themes emerged during the consultation. Many pharmacists reported that they document all identified pharmaceutical care issues that need to be monitored with

The BOPA standards and supporting guidance consultation document can be found at www.bopawebsite.org.



Pharmacists need access to patient records, to verify anticancer therapy

SACTs, as part of the verification process. The standards suggest that a structured care planning template should support this practice but acknowledges that electronic patient records or pharmacy entries in chemotherapy notes are other options.

The consultation highlighted that there are many models of pharmacist verification. This reflects how different chemotherapy services are set up. One challenge faced by some organisations when implementing the standards will be ensuring that there is enough clinical capacity for pharmacists to verify chemotherapy prescriptions and deliver pharmaceutical care — in the past, pharmacy services have focused on the operational capacity needed to prepare anticancer medicines. To help meet this challenge, BOPA will be developing a pharmacy clinical capacity toolkit that can be used to assess the capacity needed to deliver the standards. Some robust work has already been carried out on this by the Scottish Cancer Pharmacy Practice Group, a key partner in driving the development of the BOPA standards.

Another issue highlighted by BOPA members during the consultation was the

practical issue of gaining access to clinical notes/patient treatment records, in particular when verifying oral prescriptions and outpatient dispensary prescriptions. These concerns will also apply to community pharmacists if oral chemotherapy services are developed there in the future. Access to patient treatment records or clinical notes is

required to comply with the National Patient Safety Agency guidance on oral anticancer medicines.²

The consultation also highlighted that clinical pharmacists working in oncology have already developed high standards of prescription verification, and are a vital part of the management of cancer patients.

The BOPA standards

1. Check that the prescriber's details and signature are present and confirm that they are authorised to prescribe SACTs
2. Ensure the regimen has been through local approval processes
3. On the first cycle of SACT, check the regimen is the intended treatment as documented in a treatment plan, in the clinical notes or in the electronic record
4. Check that the regimen is appropriate for the patient's diagnosis, medical history, performance status and chemotherapy history
5. Check that there are no known interactions with other drugs or food, or conflicts with patient allergies and other medication
6. Check that the timing of administration is appropriate
7. Check that patient demographics have been correctly recorded on the prescription
8. Check that body surface area is correctly calculated, taking into account recent weight
9. Check that all dose calculations and dose units are correct and have been calculated correctly according to the protocol and any other relevant local guidance
10. Check cumulative dose and maximum individual dose as appropriate
11. Check the reason for and consistency of any dose adjustments
12. Check that the method of administration is appropriate
13. Check that laboratory values (e.g. full blood count) are within accepted limits, if appropriate
14. Check that the doses are appropriate with respect to renal and hepatic function, and any experienced toxicities
15. Check other essential tests have been undertaken, if appropriate
16. Check that supportive care is prescribed and is appropriate for the patient and regimen
17. Sign and date prescription as a record of verification

Panel 1: The BOPA standards for verification of prescriptions for anticancer medicines

Training requirements

All members of staff verifying prescriptions for anticancer medicines must have demonstrated suitable competence and be locally accredited for the task. It is suggested that local competency training programmes for oncology pharmacy staff could include:

- A documented training programme that lists the areas of competency and/or knowledge required
- A list of specific competencies that must be obtained. The BOPA competency framework provides a template of suitable competencies (available at www.bopawebsite.org), as do the relevant Skills for Health standards (PHARM56/57, www.ukstandards.org.uk). The Specialist Curriculum Group are also developing competencies for clinical pharmacy that include oncology (www.specialistcurriculumgroup.org)
- A period of supervised verification of chemotherapy prescriptions. During this period all prescriptions should be double-checked by a trained and competent pharmacist and each prescription/item should be recorded on a log sheet
- The signature of the pharmacist clinical lead who is responsible for cancer services confirming that the individual is competent to verify anticancer medicine prescriptions
- Appropriate training on the safety aspects of oral anticancer medicines provided to any pharmacy staff who are involved in the dispensing and supply of these medicines

Panel 2: Suggested training requirements for pharmacists who verify chemotherapy prescriptions

Supporting guidance

The standards are to be followed by a 'supporting guidance' document that will provide detailed guidance to assist pharmacists undertaking each of the steps required for verification. This is currently out for consultation with BOPA members.

The supporting guidance includes a section on education and training, and makes some suggestions about the training requirements needed for pharmacists who verify SACTs. A summary of the suggested training standards is shown in Panel 2. The supporting guidance also includes sections on dose calculations, medication counselling and emergency planning.

Conclusions

The new standards build on existing good practice and provide support for clinical pharmacy staff who are involved with the verification of prescriptions for anticancer medicines.

The BOPA standards aim to reflect best practice and optimal patient safety. It is hoped that the BOPA standards will support service improvement and development at individual trusts.

It is also hoped that the standards will help highlight the valuable role pharmacists have in ensuring the safety and quality of chemotherapy services.

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