Professional Guidance on Pharmacy Services for Clinical Trials

Version 1, October 2013
This guidance was initially prepared in 2005 on behalf of the Royal Pharmaceutical Society of Great Britain and the Institute of Clinical Research (ICR) by the Pharmacy Specialist Interest Group of the ICR. It has been reviewed and revised by the authors below as members of the Guidelines Subgroup of the National Pharmacy Clinical Trials Advisory Group (NPCTAG), a partnership group of the Royal Pharmaceutical Society (RPS). This guidance has been reviewed by Jason Wakelin-Smith of the Medicines for Healthcare products Regulatory Agency (MHRA) Good Clinical Practice (GCP) Inspectorate. We would like to thank members of the NPCTAG for their valuable feedback and input during the update of this guidance.

This guidance will be reviewed on an annual basis by the NPCTAG. If you would like to feedback comments for suggested amendments or inclusion, please contact NPCTAG via:


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Introduction

This professional guidance on pharmacy services for clinical trials has been reviewed and revised by the Guidelines Subgroup of the National Pharmacy Clinical Trials Advisory Group (NPCTAG), a partnership group of the RPS and is intended for use by pharmacy staff involved with the provision of clinical trials services at policy, strategic and operational levels.

The guidance applies to all clinical trials that are regulated by the Medicines for Human Use (Clinical Trials) Regulations 2004 and subsequent amendments\(^1,2\). This includes commercial and non-commercial clinical trials. It does not specifically relate to pharmacy practice research unless this involves a Clinical Trial of an Investigational Medicinal Product (CTIMP).

This guidance specifically relates to the medicines management of Investigational Medicinal Products (IMPs), facilities required for the support of clinical trials services in accordance with regulatory requirements and informs operational, strategic and policy decisions relating to IMPs. It is underpinned by the principles of Good Clinical Practice (GCP) for the management of IMPs\(^3,4\).

The generic terms "pharmacy" or "pharmacy staff" encompass pharmacists, pharmacy technicians and pharmacy assistants, although it is recognised that all may have different roles and responsibilities in relation to the provision of clinical trials services.

The pharmacy may support clinical trials involving medicines, biological substances, gene therapy or radiopharmaceuticals. Specific guidance and regulations exist for the management of these products. It is the responsibility of the pharmacy staff involved to ensure working knowledge of all aspects of guidance and regulatory documents and compliance thereof. Legislation and guidance documents are subject to review and amendment; it is vital that only the current versions are referred to.

Where clinical trials take place in a hospital, all IMPs should be stored and dispensed by the hospital pharmacy and managed to the same standards as licensed medicines, in accordance with local medicines management policy.

For clinical trials conducted in other settings, for example Clinical Research Facilities, Clinical Trials Units and within the primary care sector, the principles of this practice guidance should be adhered to where possible.

Further guidance regarding clinical trials in community pharmacy settings is available through the RPS pharmacy accreditation scheme – Research Ready - for community pharmacies wishing to participate in health research, including clinical trials. The accreditation scheme is aligned with the principles of this practice guidance and provides essential support for pharmacy teams – enabling them to collaborate on and host clinical trial activity in community pharmacy settings.
**Good Clinical Practice (GCP)**

All clinical trials involving IMPs must be conducted according to the principles of GCP. These are outlined in articles 2 to 5 in the EU Directive 2005/28/EC\(^5\).

The definition of GCP in the EU Directive 2001/20/EC is as follows:

> “Good clinical practice is a set of internationally recognised ethical and scientific quality requirements which must be observed for designing, conducting, recording and reporting clinical trials that involve the participation of human subjects. Compliance with this good practice provides assurance that the rights, safety and well-being of trial subjects are protected, and that the results of the clinical trials are credible.”\(^4\)

GCP is a legal requirement for all clinical trials involving investigational medicinal products (IMPs) in addition to the regulatory requirements in the UK (Medicines for Human Use) Clinical Trials regulations (as amended from time to time). Guidance on GCP for IMPs is available from the MHRA.

Individual staff members should ensure GCP competence commensurate with their roles and responsibilities in relation to CTIMPs. Whilst it may be the case that some pharmacy staff are carrying out tasks that are part of their normal role, it is recommended that they have an awareness of GCP, and that individual training is assessed as part of the organisation’s risk assessment for staff competency to participate in the conduct or support of clinical trials.

GCP training can be accessed through the National Institute for Health Research Clinical Research Network (NIHR CRN).

**Role of the Nations in Supporting Health Research**

Clinical research is a vital part of improving treatments for patients. A commitment to promote, conduct and use research to improve the current and future health and care of the population is enshrined in the seven principles of the NHS Constitution for England and is embraced by all the devolved administrations - Scotland, Wales and Northern Ireland - which have developed similar approaches to supporting research (see useful web links on page 15).

**England - National Institute for Health Research (NIHR) and the Clinical Research Network**

The NIHR is funded by the Department of Health. The NIHR Clinical Research Network (NIHR CRN), which operates as the research delivery arm of NHS England, is of particular relevance to pharmacy services. The NIHR CRN funds the provision of research nurses and other clinical research delivery staff across the country in order to develop clinical engagement in research activity, identify/recruit patients into suitable studies and carry out the clinical activities associated with studies on its portfolio. The Network also covers service support costs such as imaging, pathology sessions, lab costs etc associated with the completion of these studies.

A key role of the NIHR Clinical Research Network is to ensure that studies on its portfolio are set-up quickly, and delivered “to time and target” – that is to say they recruit the full quota of patients within the stipulated study period.

**Scotland - the Chief Scientist for Health in Scotland and NHS Research Scotland**

The Chief Scientist for Health in Scotland invests in NHS-related research and support. NHS Research Scotland (NRS) is a partnership involving Scottish NHS Boards and the Chief Scientist Office (CSO) of the Scottish Government. The overarching aim of NRS is to ensure that NHS Scotland provides the best environment to support clinical research.
Wales - The National Institute for Social Care and Health Research Clinical Research Centre (NISCHR CRC)
The National Institute for Social Care and Health Research Clinical Research Centre (NISCHR CRC) was established in 2010 as part of the research infrastructure for Wales funded by NISCHR, Welsh Government. It is hosted by Velindre NHS Trust via a sub-contract from Cardiff University, and incorporates the Wales Cancer Research Network (WCRN).

NISCHR CRC provides research staff through regional networks in North, South East and South West Wales. These are skilled research professionals with experience of direct patient and service user contact, who work to ensure the quality and delivery of NISCHR research projects.

Northern Ireland - The Northern Ireland Clinical Research Network (NICRN)
The NICRN is funded by the HSC Research & Development Division and supports high quality clinical trials across all HSC Trusts.

Its mission is to develop and enable a well-resourced network of skilled staff which provides investigators and patients from throughout Northern Ireland with access to and help in developing high quality clinical research studies across all Health and Social Care (HSC) structures.

1. The Role of Pharmacy

1.1 The role of the pharmacy in relation to clinical research is:

a) To safeguard subjects, health care professionals and the Healthcare Provider Organisation (HPO) by ensuring that IMPs are appropriate for use and are procured, handled, stored and used safely and correctly\(^{6,7,8,9}\).
b) To ensure that IMPs are managed and dispensed to patients in accordance with the duly approved current protocol (see section 10).
c) To ensure that all pharmacy clinical trials procedures comply with relevant guidelines and regulations\(^ {1,2,3,9,10}\).

1.2 It is good practice for the Healthcare Provider Organisation (HPO) to issue a policy document covering the safe handling of medicines used in clinical trials, including a statement listing the responsibilities that will be delegated to the pharmacy by the investigator. Pharmacy input into the development and review of this policy document is vital to ensure practicability and consistency with pharmacy procedures in general\(^7,9\).

2. Pharmacy Staff

2.1 The Chief Pharmacist (or equivalent) is responsible for overall service provision although it is expected that a designated member of pharmacy staff will assume operational responsibility for the pharmacy clinical trial service. This individual will usually be the first point of contact within pharmacy when trials involving IMPs are under consideration by the host HPO.

2.2 Designated pharmacy staff providing a clinical trial service must be adequately qualified, trained and experienced to assume clinical research responsibilities and should be able to provide up-to-date training records and/or curriculum vitae\(^3,10\). Pharmacy staff job descriptions should provide clarity with regard to responsibility and accountability for clinical trials.

2.3 Pharmacy staff should ensure GCP competence commensurate with their roles and responsibilities in relation to CTIMPs.
2.4 Pharmacy must hold training records and signature logs for those staff involved in clinical trial activity\(^{(1,9,11)}\). These records may be held in a central location and should be readily available for inspection if required.

3. **Pharmacy Facilities**

3.1 It is essential to ensure appropriate facilities are available before agreeing to support a clinical trial particularly one involving radiopharmaceuticals or Advanced Therapy Medicinal Products such as gene therapy and cell therapy. The pharmacy lead (or the designated member of pharmacy staff with operational responsibility) for clinical trials should liaise with, and seek advice from, other pharmacy staff (or individuals) with expert knowledge of or experience in handling these types of product.

3.2 Pharmacies should have facilities that allow for IMPs to be stored separately from normal pharmacy stock in an area with access restricted to pharmacy staff. Licensed products used as IMPs do not have to be stored separately as long as there is a process in place to ensure traceability.

3.3 IMPs that are returned by patients or have expired should be stored separately from unused IMPs\(^{(3)}\). Quarantined medication should be clearly identified and segregated from working stock.

3.4 Regular temperature monitoring of IMP storage facilities should be undertaken and records maintained. All IMP storage areas should be fitted with calibrated temperature monitoring devices that record minimum and maximum temperatures, with a robust system to alert staff if the temperature falls outside of the specified range. The temperature monitoring devices should have a valid calibration certificate which is maintained for reference. The pharmacy should have written procedures in place for the actions to be taken when the storage conditions are outside of the specified range.

3.5 Suitable archiving facilities will be required for pharmacy trial files. The system used for archiving must allow for prompt retrieval of any pharmacy study file or of non-study specific documentation (such as pharmacy standard operating procedures, original pharmacy temperature monitoring records and training records of pharmacy staff)\(^{(3)}\).

In practice it is desirable for the pharmacy file for a trial to be amalgamated back into the Investigator Site File for archiving purposes. This should be negotiated and agreed with the sponsor or local R&D Department whenever possible.

4. **Pharmacy and Resources**

4.1 The Chief Pharmacist (or equivalent) should ensure that adequate resources are available to provide a pharmacy clinical trial service so that research does not inappropriately divert pharmacy NHS resources from the provision of routine patient care\(^{(10)}\).

4.2 Pharmacy should receive funding for providing a clinical trial service. This funding should reflect the workload and cover costs involved and is separate to the prescription charge\(^{(12,13,14,15)}\). It is recommended that the NIHR study costing template is used to calculate the cost of supporting commercial trials\(^{(16)}\). For non-commercial research the attribution of costs over and above usual NHS treatment costs are set out in AcoRD\(^{(15)}\).
It is advisable to maintain records of funding received and research activities undertaken per trial to provide transparent accounts for staffing resource and capacity planning.

4.3 NHS Trusts clinical trials agreements (CTA) with HPOs should ensure that the appropriate fees for pharmacy clinical trial services are included and the required pharmacy resources are available and appropriate for the clinical trial.

4.4 A management system should be established within an HPO whereby pharmacy input is actively sought in advance of the HPO agreeing and signing the model CTA\textsuperscript{[17,18]}. 

4.5 For non-commercial research there should be an agreement in place between the trial sponsor and NHS organisation that describes the obligations and responsibilities of each party This model agreement for non-commercial research (mNCA) documents the relationship between and the responsibilities of the non-commercial sponsor(s) of a research study and the NHS organisation where the study takes place.\textsuperscript{[19]}

5. **Prescription Charges**

5.1 Prescription charges apply only to England as they have been abolished in the rest of the UK. Where it is routine practice or policy to apply prescription charges these will also apply to clinical trial medicines unless the subject is exempt or the clinical trial is placebo controlled\textsuperscript{[20]}.

5.2 A sponsor may choose to pay the prescription charges on behalf of the subjects in a clinical trial. These charges should be handled separately from clinical trial payments as per department policy.

6. **Communication Within and Outside the Healthcare Provider Organisation**

6.1 The pharmacy should ensure that an effective working relationship is established with the site investigators, research personnel, the Research & Development (R&D) department and other support services, including the clinical research network, to provide a responsive, high quality, comprehensive process for delivering the pharmacy clinical trial service.

A good working relationship should also be established and maintained with sponsors, monitors, auditors and regulatory authorities to:

- Ensure that protocol amendments, approvals and other relevant documents are provided to pharmacy before the amendment is implemented.
- Ensure the safe supply of IMPs to clinical trial subjects.
- Ensure that all data and documentation (e.g. pharmacy study file, standard operating procedures) associated with a study are accurate, up-to-date and available for audit or inspection by an appropriate authority\textsuperscript{[1,3]}.
- Ensure that medicines management systems for IMPs are robust.
- Represent and uphold the interests of the pharmacy and pharmacy professionals in clinical research.
- Ensure that the confidentiality and security of information and data about the subjects and the clinical trial are maintained and respected.
- Ensure any protocol deviations or serious breaches are reported in a timely manner to the research team, trial sponsor and the HPO.
6.2 Pharmacy staff must be aware of UK clinical trial legislation - Medicines for Human Use (Clinical Trials) Regulations 2004 - and subsequent amendments, and GCP\textsuperscript{1,2,4} and local requirements for the reporting of suspected fraud, misconduct or other incidents involving a breach of the protocol or legislative requirements (see Serious Breach in glossary\textsuperscript{21}). If pharmacy staff become aware of any of these they should notify the investigator, sponsor and the local R&D department at the earliest opportunity.

7. Pharmacy and the R&D Department

7.1 The clinical trial pharmacy staff should foster a good working relationship with their local R&D Department. The pharmacy staff will be able to advise on issues such as:

- The source and quality of IMPs including comparators to be used.
- The cost of IMPs.
- The acceptability of the packaging and labelling of IMPs.
- Where the IMP is stored out of pharmacy custody, advice and risk assessment of the storage requirements for the IMPs.
- The regulatory approval process, providing support and assistance where necessary.
- The identification of possible clinical risk issues and how to address these where the use of an IMP may force changes to normal routine practice.
- The regulations and guidelines on GCP and Good Manufacturing Practice (GMP).
- The Trust’s clinical risk assessments of individual clinical trials and on systems and procedures for internal clinical trials.
- Health and safety aspects of drug handling, dispensing and reconstitution.
- Legacy after trial closure, i.e. what access will patients have to continuing treatment and what it could cost.

7.2 Where appropriate, pharmacy should be involved in the Trust peer review process of clinical trial protocols. Where there is a conflict of interest for the pharmacy, it should be declared.

8. Ethics Committee

8.1 Ethics committees that are reviewing clinical trials involving IMPs should have a pharmacist as a member. The pharmacist must be aware of, and where appropriate, must declare any possible conflict of interest between her/his role on the ethics committee and involvement in providing pharmacy clinical trial services or in the clinical trial as a researcher/investigator, or any relationship to the sponsor\textsuperscript{22,23}.

The ethics committee should ensure that trial participants are informed about whether they will be able to continue to receive the trial medication at the end of the trial should they gain benefit from it.

9. Set-up of a Study

9.1 Designated pharmacy staff should review each protocol, assess the feasibility of the study, cost the work to be undertaken by the pharmacy and where appropriate assess the impact for pharmacy.

9.2 Pharmacy clinical trials staff should participate in the investigator meeting or the site selection visit and site initiation visit. A pre-initiation meeting with pharmacy is helpful in order to agree the details of the pharmacy arrangements with the sponsor. Pharmacy staff should use their
professional expertise to review the protocol and explain the correct use and storage of any IMPs or non-IMPs to other healthcare professionals (e.g. investigators and research nurses) who may not be familiar with these. This has particular importance when the study medication is not stored in pharmacy.

9.3 IMPs must be manufactured in accordance with Good Manufacturing Practice (GMP) in a unit which holds a manufacturing authorisation. In the UK this authorisation is an MIA (IMP) granted by the Medicines and Healthcare Products Regulatory Agency (MHRA)(11). Requirements for other EU states will be detailed in the clinical trial application. IMPs must be labelled in accordance with Annex 13 and certified by a QP(IMP) for release(1,8,24). The distinction between manufacture and assembly and the circumstances where a QP (IMP) is not required are defined in The Medicines for Human Use (Clinical Trials) Regulations 2004(11). Regulation 37 of The Medicines for Human Use (Clinical Trials) Regulations 2004 provides an exemption from the need for hospitals and health centres participating in a trial to hold an MIA(IMP) in order to assemble IMPs for use in that trial(11). This exemption does not include community pharmacies(10). Licensed medicines (with a UK or EEA Marketing Authorisation) may be used, unmodified, as IMPs without the requirement for QP (IMP) certification for release. A risk assessment will determine whether such products require additional, clinical trial-specific labelling to comply with the regulations(25).

9.4 Pharmacy should request samples of the packaging and labelling of IMPs from the sponsor in advance of local R&D approval of the clinical trial. Confirmation should be sought from the sponsor that additional routine dispensing labels may be added to the product if required. If samples are not available in advance pharmacy should check the suitability of the IMP packaging and labelling when the IMP is received on-site and prior to being issued. Sufficient time should be allowed for a risk assessment of the product and for additional pharmacy labels to be produced if necessary prior to any dispensing(26). Pharmacy should check that the packaging is child resistant, where appropriate, and that the label on the IMP complies with Annex 13 and with all other applicable legislation. Pharmacy should also ensure that the labelling of the dispensed products is legible and understandable by the subject(1,8).

9.5 Where drug accountability forms, prescription forms and other associated forms are supplied by the sponsor, the pharmacy should assess their appropriateness for the data they are designed to capture and for their suitability for use within the pharmacy. The pharmacy may instead use their own documentation with the sponsor’s agreement(26).

9.6 With the information obtained in 9.4 and 9.5, the pharmacy procedures for the study should then be prepared and approved, in accordance with local practice, prior to the treatment of the first patient. It can be helpful to use the dispensing of the first prescription for a trial as a ‘pilot’ to ensure the procedures are applicable to the ‘real life’ situation.

9.7 Prior to the commencement of a clinical trial it should be determined whether adequate arrangements are, or will be made to ensure that continuing treatment with the IMP(s) will be available to trial subjects if the trial IMP proves to be beneficial.

9.8 Pharmacy should agree with the sponsor whether unissued IMPs and returned used IMPs returned by clinical trial subjects are to be returned to the sponsor or disposed of locally, in accordance with the sponsor’s instructions and Trust procedures(26).

9.9 Although unblinding is the investigator’s responsibility and decision, the pharmacy may be required to hold code break (unblinding/unmasking) envelopes or to have access to a telephone
or web-based system for emergency unblinding of a patient’s trial treatment. The code break procedure for each trial should be documented and tested prior to the first patient being recruited. In circumstances when the pharmacy does not hold the code break the pharmacy should ensure that there is a system in place for providing 24-hour cover to access the code-break for a clinical trial\(^9\).

10. Approvals

10.1 Prior to the commencement of a clinical trial and the dispensing of any IMPs the pharmacy must be satisfied that clinical trials have:

- appropriate regulatory documentation in place i.e. MHRA Clinical Trial Authorisation.
- been given a favourable opinion by the appropriate Research Ethics Committee (REC).
- received NHS permission or approval from the local R & D Department\(^1\).

In addition, the pharmacy must be in receipt of the final approved version of the protocol and any approved amendments prior to dispensing any IMPs. Pharmacy should have access to the latest version of the investigator brochure, documenting its location with a file note if not kept in the pharmacy file\(^1\).

11. IMP Management

11.1 The pharmacy should have written clinical trials standard operating procedures (SOPs) to cover the following essential procedures\(^5,27\):

- Pharmacy approval of a clinical trial
- Receipt and recording of the safe delivery of IMPs
- Safe handling and storage of IMPs
- Temperature monitoring and reporting of temperature deviations
- Risk assessment of storage areas for IMPs outside pharmacy
- Quarantine of IMPs
- Expiry date relabelling
- Unblinding
- Preparation and dispensing of IMPs in accordance with professional standards (including dispensing against an appropriate prescription, maintaining drug accountability records and ensuring that all IMPs are labelled with the appropriate pharmacy label)
- Return and disposal of unused IMPs
- Reconciliation of IMPs
- Drug alerts and recalls of IMPs
- Maintaining a pharmacy study file
- Training of clinical trial pharmacy staff
- Archiving of clinical trials documentation

SOPs should be authorised and reviewed at regular intervals and when new legislation or guidance is published. Trial-specific SOPs must be reviewed with each protocol amendment. SOPs and other documents produced by pharmacy must be version-controlled to ensure that the correct documents are used. Superseded documents must be clearly marked as such.

11.2 Pharmacy is responsible for keeping accurate records with sufficient information to provide a full audit trail from the receipt of the IMPs to their issue and/or return and/or removal from site or destruction\(^8\).
11.3 Whenever possible, IMPs should be stored in the pharmacy. However, it may be necessary to store IMPs on wards or in other departments (for example, if IMPs are to be used in emergency situations or for inpatients). If IMPs are to be stored outside of the pharmacy a risk assessment should be performed to determine the following:

- Where the IMP will be stored on the ward / department
- If the IMP storage is suitable, for example if the IMP storage is secure and separate from routine stock
- If the storage area temperature is within the appropriate range, and regularly monitored
- What records will be maintained and by whom

This process should be documented and filed in the pharmacy file.

Pharmacy must ensure that any IMPs stored outside pharmacy are stored appropriately throughout the conduct of the trial according to local policy\(^1\). Where storage conditions are not met or associated documentation (eg. temperature logs or IMP accountability) is not completed consideration should be given to returning the IMP to pharmacy until the issues are resolved, although care should be taken that the impact to the trial / supply of medication to participants is minimised.

11.4 It is good practice for pharmacy staff to assess whether any IMPs in the possession of a patient and intended for continued use when the patient is admitted to hospital for example, are suitable for use. Where possible the pharmacy staff should notify the investigator of any unplanned hospital admissions.

11.5 Dispensed IMPs should always be labelled with the patient’s name or initials and date of dispensing. However to maintain confidentiality, the patient’s identity must be removed or obscured, if the IMP is returned to the sponsor\(^1\).

11.6 Clinical trial subjects should be counselled on the correct use of the IMP. This should reflect the written information provided e.g. trial-specific Patient Information Sheet, as a licensed IMP may be used outside of the terms of its Marketing Authorisation.

11.7 Pharmacy staff should promptly notify all reported, possible adverse events experienced by patients in a clinical trial to the investigator.

12. Prescriptions for IMPs

12.1 Only qualified and registered medical practitioners and health care professionals who are supplementary or independent prescribers* can prescribe IMPs. All prescribers for a clinical trial must be named on the delegation log for the study which is retained within the investigator site file. Although not a requirement of the Clinical Trials Regulations, it is good practice for IMPs to be prescribed on a prescription form (paper or electronic) or a hospital drug chart. A record in a patient’s medical notes or clinical trial case report form (CRF) by the investigator (or delegated prescriber) is also acceptable, however local record keeping practice may require the organisation to document on a prescription form as with other medicinal products. Non-IMPS (nIMPs) however fall under general medicines legislation and those that are Prescription Only Medicines must be prescribed on a prescription in the usual way.
*A supplementary or independent prescriber can prescribe medicines if part of a clinical trial\(^{(28)}\). The pharmacy department should be provided with written confirmation of this arrangement signed by the local investigator and the sponsor. This document should be included in the pharmacy study file and may be in the form of a delegation log.

12.2 Where possible, study-specific clinical trial prescription forms should be used to facilitate the prompt identification of the clinical trial and dispensing procedures and to reduce the risk of dispensing errors.

12.3 Where an IMP is a licensed medicinal product used in the trial within its marketing authorisation clinical trial, labelling is not required. In this situation the IMP can be dispensed against a normal prescription and labelled in accordance with the Medicines for Human Use (Marketing Authorisations etc) Regulations 1994. This activity is covered by Regulation 46 of the Medicines for Human Use (Clinical Trials) Regulations\(^{(1)}\).

12.4 It is acceptable to use electronic prescribing systems for prescribing trial chemotherapy regimes.

12.5 It is essential that prescriptions for IMPs clearly identify the clinical trial, the subject and medication required. When an IMP is prescribed for an in-patient, the hospital drug chart should clearly identify the clinical trial and the IMP and include the words "Clinical Trial".

12.6 IMP doses should be validated by a pharmacist before dispensing to ensure that the IMP is being prescribed according to the protocol.

12.7 Prescription charges may apply (see section 5).
**Glossary of Terms** (For a full explanation of each term consult the appropriate references or access the relevant website):

CASE REPORT FORM (CRF): A case report form is a paper or electronic document specifically used in clinical trial research. The Case Report Form is designed to record all of the protocol required information to be reported to the sponsor on each patient participating in a clinical trial.

CLINICAL TRIAL OF AN INVESTIGATIONAL MEDICINAL PRODUCT (CTIMP): A interventional trial of a medicinal product that must be conducted in accordance with the Medicines for Human Use (Clinical Trials) Regulations and subsequent amendments\(^1,2\).

DELEGATION LOG: A list of roles and responsibilities for the various members of the research team that are delegated and authorised by the Chief or Principal Investigator at the site.

GOOD CLINICAL PRACTICE (GCP): A set of internationally recognised ethical and scientific quality standards which must be observed for designing, conducting, recording and reporting clinical trials that involve the participation of human subjects\(^3,4\).

GOOD MANUFACTURING PRACTICE (GMP): That part of quality assurance which ensures that medicinal products are consistently produced and controlled to the quality standards appropriate to their intended use and as required by the marketing authorisation (MA) or product specification. GMP is concerned with both production and quality control\(^8,24\).

HEALTHCARE PROVIDER ORGANISATION (HPO): Any healthcare organisation responsible for provision of healthcare including medicines and IMPs or a pharmacy providing medicines and IMPs, to patients directly or via another HPO.

HEALTH RESEARCH AUTHORITY: The Health Research Authority (HRA) is a NHS organisation established on 01 December 2011 as a Special Health Authority. The purpose of the HRA is to protect and promote the interests of patients and the public in health research.

INVESTIGATOR: An authorised health care professional responsible for the conduct of a clinical trial at a clinical trial site. If this trial is conducted by a team of authorised health professionals at a clinical trial site, the investigator is the leader responsible for that team\(^1\). Often the investigator within the hospital setting is a medically qualified consultant and in primary care, a medically qualified general practitioner.

INVESTIGATOR BROCHURE: A compilation of the clinical and non-clinical data on the investigational product(s) which is relevant to the study of the investigational products in human subjects\(^3\).

INVESTIGATIONAL MEDICINAL PRODUCT (IMP): A pharmaceutical form of an active substance or placebo being tested or used as a reference in a clinical trial\(^3\).

MHRA: Medicines and Healthcare products Regulatory Agency

MONITOR: A person who has been trained to oversee the progress of a clinical trial, and to ensure that the clinical trial is conducted in accordance with the clinical trial protocol, standard operating procedures, good clinical practice and applicable regulatory requirements.\(^3\)

NATIONAL PHARMACY CLINICAL TRIALS ADVISORY GROUP (NPCTAG): A partnership group of the Royal Pharmaceutical Society established in 2010. Membership includes representatives from a
range of hospital pharmacy disciplines and other relevant specialist groups, MHRA and the NIHR. The group’s objectives are to provide advice to NHS pharmacy services, to the NIHR Clinical Research Networks Coordinating Centre, to support education & training of pharmacy staff, and to provide a forum for communication with MHRA about clinical trial issues.

NON INVESTIGATIONAL MEDICINAL PRODUCT (NIMP): A NIMP is a medicinal product which is not defined as an IMP in a trial, but may be taken by subjects during the trial. Examples include concomitant or rescue/escape medication used for preventive, diagnostic or therapeutic reasons and/or medication given to ensure that adequate medical care is provided for the subject during a trial. See EU Guidance on Investigational Medicinal Products (IMPs) and Non Investigational Products (NIMPs) (29).

PHARMACY STUDY FILE: The pharmacy file is a sub folder of the Investigator Site File which contains all the documents pertaining to the IMP management. It is kept in Pharmacy throughout the trial, until the close out visit where it may be reconciled with the Investigator Site File or archived in pharmacy in accordance with the clinical trial agreement. This usually includes, but is not limited to clinical trial protocol and amendments, investigator brochure, copies of approval documents (ethics, MHRA, NHS R&D), clinical trial agreement, pharmacy dispensing procedures, pharmacy signature list, monitoring visit log, drug accountability forms, receipt and return of IMPs, unblinding procedure, key contact details, subject I.D. logs and any relevant correspondence (including hard copies of e-mails).

PROTOCOL: A document that describes the objective(s), design, methodology, statistical considerations, and organisation of a trial. The protocol usually also gives the background and rational for the trial, but these could be provided in other protocol reference documents (1,3).

RESEARCH ETHICS COMMITTEE (REC): In the NHS NRES Research Ethics Committees are established by The Health Research Authority. A REC is an independent body consisting of healthcare professionals and lay members, whose responsibility it is to safeguard the rights, safety, dignity and well-being of people participating in research in the NHS, and to provide public assurance of that protection by, among other things, expressing an opinion on the trial protocol, the suitability of the investigators and the adequacy of facilities, and on the methods and documents to be used to inform trial subjects and obtain their informed consent (1).

SERIOUS BREACH: A breach of a clinical trial protocol or good clinical practice in connection with a trial, which is likely to affect, to a significant degree, the safety or physical or mental integrity of trial subjects or the scientific value of the trial (1,2,21).

SPONSOR: A sponsor is, in relation to a clinical trial, a person/organisation who takes responsibility for the initiation, management and financing (or arranging the financing) of that clinical trial (1,3,30).
References:

14. NHS Research and Development Forum and the ABPI Guidance to Facilitate the Conduct of Commericially Funded Research in the National Health Service (Secondary Care). January 2005
16. NIHR. National commercial study costing templates: http://www.crncc.nihr.ac.uk/Life+sciences+industry/tools/costing
27. Pharmacy Sub-committee. SOPs and checklists for pharmacy personnel: an aid to producing pharmacy clinical trial operating procedures. The Institute of Clinical Research. 2002,
Useful Web Links

ABPI Guidelines  
http://www.abpi.org.uk/our-work/library/guidelines/Pages/default.aspx

ABPI – Model Clinical Trial Agreement  

Chief Scientist Office  
http://www.cso.scot.nhs.uk/

Clinical Trials Tool Kit (NIHR)  
www.ct-toolkit.ac.uk

Department of Health  
www.dh.gov.uk

European Commission – EudraLex Clinical Trials Guidelines  

Health Research Authority Central Office for Research Ethics Committees (COREC)  
http://www.hra.nhs.uk

Institute of Clinical Research  
http://www.icr-global.org/

Medicines and Healthcare products Regulatory Agency (MHRA)  
www.mhra.gov.uk

MHRA GCP pages -  
http://www.mhra.gov.uk/Howweregulate/Medicines/Inspectionandstandards/GoodClinicalPractice/index.htm

MHRA Clinical Trials for Medicines pages -  
http://www.mhra.gov.uk/Howweregulate/Medicines/Licensingofmedicines/Clinicaltrials/index.htm

National Research Ethics Service  
http://www.nres.nhs.uk

National Institute for Health Research (NIHR)  
www.nihr.ac.uk

National Institute for Social Care and Health Research Clinical Research Centre (NISCHR CRC - Wales)  

NHS Research Scotland  
http://www.nhsresearchscotland.org.uk/

NIHR Clinical Research Network  
http://www.crncc.nihr.ac.uk/homepage
Northern Ireland Clinical Research Network (NICRN)
http://www.nicrn.hscni.net/

Research and Development Forum
www.rdforum.nhs.uk

Royal Pharmaceutical Society
www.rpharms.com

RPS National Pharmacy Clinical Trials Network

The Medical Research Council
www.mrc.ac.uk