CL5 – The service implements and monitors systems to manage drugs, contrast media and radioactive medicinal products.

a. Legislation and guidance from health agencies and professional bodies requires the safe prescription, receipt, preparation, administration and storage of drugs, contrast media and radioactive medicinal products, and the effective management of adverse reactions. Appropriate record keeping should be maintained for each of these activities. Procedures should be in place to manage the disposal of these agents that are out of date, partly used or damaged, in accordance with legislation (see also standard statement SA6).

b. Policies and protocols for the management of these agents should be grounded in current best practice and reflect professional guidance and statutory requirements. The procedures should cover all aspects of the use of these agents including, for example, aseptic non touch technique (ANTT) as well as the use of equipment such as pressure injectors. They should include a clear definition of roles and responsibilities, including staff entitlement and evidence of relevant education and training. The process of entitlement, including authorisation to act, should be clearly identified. Specific protocols should be developed regarding the administration of these agents to children and young people. Relevant staff should be aware of the procedures and how to access them, and any changes should be communicated to them.

c. Mechanisms should be in place for the identification and management of patients with an increased risk of adverse reactions to drugs/contrast media/radioactive medicinal products. Staff should be alert for early signs of an adverse reaction and be aware that such patients require observation, possibly with treatment, to prevent progression. Critical factors will include awareness and recognition of early signs followed by appropriate incremental intervention. Local agreements should be in place regarding observation time periods for patients following the injection of contrast media, which should reflect guidance and best practice. There should be evidence of appropriate staff training.

d. Robust systems should be in place to ensure that these agents are prepared in an appropriate and hygienic way, following published protocols reflecting manufacturers' instructions and consultation with the local pharmacy department.

e. Protocols developed by multidisciplinary teams should be in place for clinical monitoring and patient surveillance during and after procedures. Clinical and instrumental monitoring to a degree relevant to the patient's medical status and the sedation method should be used. One member of the care team must have a defined responsibility for patient observation and record keeping. Monitoring and observation must be continued into the recovery period.

f. Staff who have sufficient experience to deal with any adverse reactions safely and to manage any potential complications should be available. All relevant staff within the service should be trained in basic life support and resuscitation and then undertake a formal training programme at least once every year. Adequate resources should be available to cope with adverse reactions. Adverse reactions involving neonates, children and young people should be managed in accordance with specific procedures drawn up in consultation with paediatric radiologists, paediatricians and paediatric anaesthetists.

g. Resuscitation equipment should be easily accessible wherever the service is delivered and stocked with appropriate medicines and equipment which must be regularly checked and maintained. Adult and paediatric resuscitation charts providing information regarding steps undertaken and dosage of drugs given for anaphylactic reaction and resuscitation should be displayed and easily accessible in an emergency. Clearly labelled dosages and equipment for paediatric practice should be available where applicable. Cardiac arrest telephone

numbers and the location of the nearest resuscitation equipment should be clearly displayed in all appropriate areas and should be sited close to all high-risk areas.

h. Adverse reactions or near misses should be documented, recorded in the patient's notes and reported in accordance with local procedures. Where appropriate, a report should be made to the relevant national body in accordance with national guidelines. An example being the Medicines and Healthcare products Regulatory Authority Yellow Card Scheme in England and Wales.

i. Policies and procedures regarding the administration of drugs/contrast media/radioactive medicinal products and the aftercare of patients should be developed in collaboration with appropriate departments or organisations external to the service, particularly an anaesthesia department. There should be evidence that staff have been appropriately trained for the tasks undertaken.

j. Policies and procedures should be in place to ensure collection of essential information from a patient before the administration of a contrast agent, drug or radioactive medicinal product. This should include: the history of previous drug/contrast reaction(s); existing medical conditions; preparation by the patient for the procedure, such as fluid intake levels.

k. There should be systems in place to ensure an adequate supply of radioactive medicinal products to meet the normal and predicted demands of the service, and to assure continuity of supply in the event of increased demand or interruption of normal supply channels. Contingency plans should be available to facilitate response to national or international shortages in supply, including collaboration with other services and changes to work patterns.

l. Systems should be in place to facilitate the efficient and effective use of radioactive medicinal products, including the booking and grouping of examinations as far as possible to allow maximal use of products. Variations in dosage may help in this, subject to the ALARP principle and the justification of variations from dosage reference levels. Clinical effectiveness and efficacy should not be compromised.

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