CIRCUS TOOL

Guérin Aurélie¹, Prot-Labarthe Sonia^{2,3}, Boulkedid Rym⁴, Bourdon Olivier^{2,5,6}, Bussières Jean-François^{1,7}

1. CHU Sainte-Justine, Pharmacy Department and Pharmacy Practice Research Unit, Montréal, Québec, Canada; 2. CHU Robert-Debré, Pharmacy Department, Paris, France; 3. French Society of Clinical Pharmacy; 4. CHU Robert-Debré, Epidemiology Department, Paris, France; 5. Department of clinical pharmacy, Faculty of pharmacy, University Paris Descartes, Sorbonne Paris Cité, Paris, France; 6. Laboratory Education and Health Practices EA 3412, University Paris 13, Sorbonne Paris Cité, France

7. Faculty of pharmacy, University of Montréal, Montréal, Québec, Canada

No	Domains	Safety practice compliance criteria	Compliance C: compliant PC: partially compliant NC: non compliant
A1	Patient age	Lack of a patient date of birth is a blocking criterion for WRITING a prescription.	
A2	Patient age	Lack of a patient date of birth is a blocking criterion for DISPENSING a prescription.	
B1	Patient weight	Lack of recent weight (i.e. < 30 days) is a blocking criterion for WRITING a prescription.	
B2	Patient weight	Weight is always linked to the weight measurement date.	
B3	Patient weight	Weight transcription tools clearly allow the measurement unit for weight to be confirmed (i.e. g, kg, ounces, lbs).	
C1	Allergies and intolerances	The reference to allergies and intolerances is always consulted by the PRESCRIBER before WRITING a prescription.	
C2	Allergies and intolerances	The reference to allergies and intolerances is always consulted by the PHARMACIST before DISPENSING a prescription	
C3	Allergies and intolerances	The ELECTRONIC PRESCRIBER can clearly document allergies and intolerances in the different fields.	
C4	Allergies and intolerances	The ELECTRONIC PHARMACOLOGY RECORD can clearly document allergies and intolerances in the	
D1	Use of the decimal point	A policy and procedure defines the method for optimally using the decimal point as a full stop or comma in writing and displaying medication prescriptions (e.g. the dose 1,0 mg becomes 1 mg, the dose .1 mg should be 0.1	
E1	Recommended medication dose	mg). Reference to the recommended dose per individual dose or day (e.g. 10 mg/kg) is included (if applicable) in the prescribing tool in addition to the actual desired dose (e.g. 30 mg for a 3 kg patient)).	
F1	Concentration of a medication solution	Reference to the concentration of a solution is required in addition to the flow rate when a prescription is written (e.g. heparin 10,000 units/mL, 2 mL/hour).	
F2	Concentration of a medication solution	The type of solvent, dilution volume or even the volume drawn up must be stated on all prescriptions requiring nurse handling of this type.	
G1	Concentration of an oral	Reference to the concentration of an oral solution of suspension is required to write a prescription.	
G2	Concentration of an oral solution/suspension	A document stating the dose rate/mg/ml equivalences for oral proprietary products is available for all health professionals.	
H1	Off Johal was suffide of	A document stating the methods for reconstituting/administering the main injectable medications used in the hospital is available for all health professionals.	
	Off Johal was sutside of	A mechanism exists requiring the prescriber to justify off-label use and use which is not recognised in the drug handbook/drug formulary. Off label prescribing is discussed in the begrital mediantions committee.	
l2	Off-label use/use outside of guidelines	Off-label prescribing is discussed in the hospital medications committee.	
J1	Selection of the most appropriate pharmaceutical form	The PRESCRIBER can consult all of the available pharmaceutical forms in the drug formulary in real time for a given medication in order to select the most appropriate form.	
J2	Selection of the most appropriate pharmaceutical form	The PHARMACIST can consult all of the available pharmaceutical forms in the drug formulary in real time for a given medication in order to change the prescribed form if this is not the most suitable.	
K1	Identification of excipients	A reference tool allows the excipient content of medications used to be checked in real time to avoid inappropriate use.	
L1	Drug formulary	The number of presentations available by medication in the drug formulary is limited in order to avoid mediation errors.	
L2	Dalamant information against	A reference tool can be used to confirm whether a tablet can be crushed or a capsule opened in a given substrate in real time in order to facilitate administration to a young child or through an enteral tube.	
M1	Relevant information sources	All treatment protocols involving medications are signed by a dector and a conject pharmacist	
N1	Validation of medication treatment protocols	All treatment protocols involving medications are signed by a doctor and a senior pharmacist.	
N2	Validation of medication treatment protocols	The document management system for treatment protocols (paper or electronic) allows signatures and the current date of application or update of the protocol to be confirmed.	
01	Pre-written prescription sheet for intensive care	A pre-written administration sheet is available for intensive care with the dosage of emergency medications adjusted for the actual weight of each patient.	
P1	Validation of medication prescriptions	The electronic pharmacological record displays alerts when the dose prescribed is above or below the recommended interval taking account of weight.	
Q1	Use of correct oral syringes	Only enteral (safety) syringes are used for oral administration or administration through a tube.	
R1	Specific preparation by pharmacy	If no oral form is suitable for administration to children, the pharmacy makes a specific preparation.	
S1	Double checking by care staff	Real time access is available to the list of medications which require double checking by another nurse before final preparation and administration.	
T1	High risk medications	High risk medications are identified in order to increase awareness of the different stages of the drug use process	
U1	Use of bar code readers	Bar code readers are used to manage and dispense medications by pharmacy.	
V1	Local pharmacists in departments	A pharmacist is present in departments in order to offer local pharmaceutical care.	
W1	Training in the risks of the drug use process	Multi-disciplinary training (doctor, pharmacist, nurse) is offered intermittently to all DOCTORS AND INTERNS in medicines on the risks of the drug use process particularly those related to pediatrics (i.e. critical stages of the circuit, exemplary and prohibited practices).	
W2	Training in the risks of the drug use process	Multi-disciplinary training (doctor, pharmacist, nurse) is offered intermittently to all NURSES in medicines on the risks of the drug use process particularly those related to pediatrics (i.e., critical stages of the circuit, exemplary and prohibited practices).	
W3	Training in the risks of the drug use process	Multi-disciplinary training (doctor, pharmacist, nurse) is offered intermittently to all PHARMACISTS AND PHARMACY INTERNS IN PHARMACY in medicines on the risks of the drug use process particularly those related to pediatrics (i.e. critical stages of the circuit, exemplary and prohibited practices).	
W4	Training in the risks of the drug use process	Multi-disciplinary training (doctor, pharmacist, nurse) is offered intermittently to all TECHNICIANS in medicines on the risks of the drug use process particularly those related to pediatrics (i.e. critical stages of the circuit, exemplary and prohibited practices).	

