CHECKLISTS FOR ENDORSEMENT OF MEDICATION CHARTS/FORMS AND MEDICATION-RELATED PROTOCOLS/GUIDELINES

2018

NSW GOVERNMENT

CLINICAL EXCELLENCE COMMISSION

National Library of Australia Cataloguing-in Publication entry
Title: Checklists for Endorsement of Medication Charts/Forms and Medication-Related Protocols/Guidelines 2018

ISBN: 978-1-76000-932-8
SHPN: (CEC) 180569

Suggested citation
[Clinical Excellence Commission, 2018, Checklists for Endorsement of Medication Charts/Forms and Medication-Related Protocols/Guidelines 2018
Sydney: Clinical Excellence Commission

Clinical Excellence Commission
Board Chair: Associate Professor Brian McCaughan, AM
Chief Executive: Ms Carrie Marr

Any enquiries about or comments on this publication should be directed to:
Clinical Excellence Commission
Locked Bag 8
HAYMARKET NSW 1240
Phone: (02) 9269 5500
Email: cec-medicationsafety@health.nsw.gov.au

Introduction

The purpose of the checklists, provided in Tables 1 and 2, is to guide the endorsement process by the Medication Safety Expert Advisory Committee (MSEAC) of medication-related documents intended for use across NSW Health facilities such as medication charts/forms and protocols/guidelines that involve the use of medicines.

MSEAC provides expert advice to the NSW Clinical Excellence Commission and the NSW public health system on issues related to Medication Safety. It supports medication safety practices in the NSW health system by reviewing, developing and endorsing paper-based and electronic materials that will improve the safety of medicines use.

All medication-related State Forms require endorsement by MSEAC prior to their submission to the State Forms Management Committee. The checklists can also be used by hospital/district Drug and Therapeutics Committees (DTCs) to guide the endorsement of locally-developed medication charts/forms (where deemed appropriate)[1] and medication-related protocols/guidelines.

The checklist shown in Table 1 applies to all medication charts that require prescribers to hand write orders or sign printed orders, and all paper medication charts that are printed from an electronic prescribing system for the purpose of continuity of care during downtime or patient transfer. This document is not intended to be used for the endorsement of on-screen medication orders created in electronic medication management systems.

Items included in the checklists are based on best practice safety principles for the design of medication materials, and display of medicines information. Where it is not possible or applicable to meet an item, an explanation which outlines how medication safety risks have been mitigated should be documented in the Action/Comment column. Review by an independent editor is recommended prior to submission to MSEAC/DTC to ensure readability, use of correct terminology and identification of errors.

In addition to guiding the endorsement process, this checklist will assist medication chart/form and protocol/guideline developers to:

1. Comply with the requirements for endorsement
2. Meet Australian Standard AS2828.1:2012
3. Comply with the safety feature principles of the National Inpatient Medication Chart (NIMC)
4. Support improvements in patient safety e.g. through the inclusion of human factors principles that make charts/forms and protocols/guidelines easier to understand and use
5. Standardise chart/form and protocol/guideline development processes

---

[1] Refer to NSW Health Policy Directives PD2013_043 *'Medication Handling in NSW Public Health Facilities'* and PD2009_072 *'State Health Forms'* for requirements relating to the development and approval of locally-developed medication charts/forms

Table 1: Checklist for Endorsement of Medication Charts/Forms

No.	Item/ step	Yes / No	Action / Comment
1.	The chart / form is/has been developed in the State Format[2].		
2.	The need for a new chart or clinical form has been evaluated and included a review of existing forms/literature. If a new chart or clinical form was deemed necessary, the rationale for the new chart or clinical form has been provided to MSEAC.		
3.	A broad and inclusive multidisciplinary consultation process inclusive of all relevant stakeholders has been undertaken during development (documentation should be provided that includes all feedback[3]).		
4.	The medication chart/form has been piloted and evaluated to show improvement in the safety or quality of medication use, with supportive documentation in the form of a report provided.		
5.	Patient identification is on all pages where medication for administration is prescribed and recorded. It includes an area to record four identifiers (name, sex, date of birth and MRN) and an area for the first prescriber to print patient name. These areas are provided in a standard location at the top of the page(s).		
6.	Includes an area to record patient weight and height. For paediatric charts there is an additional area for date weighed, body surface area, and gestational age.		
7.	Includes an area to record patient location.		
8.	Includes, if applicable, an area to record medication chart number and existence of more than one medication chart.		
9.	Includes an allergy and Adverse Drug Reaction (ADR) alert box (preferably printed in red). The area records medicine and reaction details (or nil or unknown as appropriate), date or time frame, and name and signature of health professional recording. The allergy/ADR alert box is visible from all pages of the medication chart with details visible or reference made to the page with the allergy/ADR details.		
10.	Includes, if applicable, an area to record medicines taken prior to presentation to hospital (preferably printed in red) or, an area that references where this information is recorded e.g. NSW Health Medication Management Plan (SMR130007).		

[2] NSW Health Policy Directive PD2009_072 *'State Health Forms'*

[3] Any major objections in feedback received must be disclosed to the Medication Safety Expert Advisory Committee

No.	Item/ step	Yes / No	Action / Comment
11.	If applicable, includes an area for once-only, nurse-initiated medicines. Such an area will include the date and time a medicine is to be administered and the time the medicine was administered.		
12.	If applicable, includes an area to record telephone orders. Must include area for the initials of two nursing staff to confirm and check the verbal order.		
13.	If applicable, includes an area to record variable dose medicines (preferably printed in red). This area includes space to record drug levels and the time(s) levels were taken.		
14.	If applicable, includes an area to record VTE prophylaxis (preferably printed in red).		
15.	If applicable, includes an area to prescribe warfarin (preferably printed in red). This area allows for the recording of the dose prescribed on a daily basis, target International Normalised Ratio (INR) range, INR result, two nursing staff initials for second person check and the ability to select or record medication brand.		
16.	If applicable, includes an area to record anticoagulant education (preferably printed in red) consistent with the National Inpatient Medication Chart (NIMC).		
17.	Each regular medicine order to contain an area for recording: • date of order • active ingredient medicine name(s) (n.b. brand names alone are not acceptable with the exception of some combination products and other locally or state-approved exceptions) • if the medication is slow release, preferably by use of a slow release box (printed in red) • route of administration • dose • frequency and administration times • indication • prescriber signature • printed prescriber name • prescriber contact details • dose calculation (for paediatric charts) • administration (preferably for seven to ten days)		
18.	Includes an area to record recommended administration times consistent with the NIMC.		

No.	Item/ step	Yes / No	Action / Comment
19.	Includes an area to record pharmaceutical review.		
20.	If applicable, includes an area to record discharge supply.		
21.	Includes 'reasons for not administering codes' (codes to be congruent with those used on the NIMC).		
22.	If applicable, includes a separate area to record 'as needed' PRN orders. The area records: • active ingredient medicine name(s) (n.b. brand names alone are not acceptable with the exception of some combination products and other locally or state-approved exceptions) • dose and hourly frequency • administration route • maximum PRN dose in 24 hours • indication • prescriber signature, printed name and contact details • date and time of administration • dose administered • route administered • initials of nurse administering.		
23.	If the medication chart is generated from an electronic system and pre-populated with medication orders: • the active ingredient medicine name(s) should be used (n.b brand names alone are not acceptable with the exception of some combination products and other locally or state-approved exceptions) • there should be adequate space between the medication name and dose (e.g. propranolol 20 mg not propranol20mg)[4] • abbreviations should be avoided (or only use those approved)[3,5] • orders are to be free of any error prone terms [3,4] • pre-populated printed medication order information (e.g. active ingredient medicine name, dose) is easily distinguished (i.e. in larger font or different shading/colour) from text that is inherent to the medication chart.		

[4] Australian Commission on Safety and Quality in Health Care (2016) *'National guidelines for on-screen display of clinical medicines information'* https://www.safetyandquality.gov.au/wp-content/uploads/2016/03/National-guidelines-for-onscreen-display-of-clinical-medicines-information.pdf

[5] Australian Commission on Safety and Quality in Health Care (2016) *'Recommendations for terminology, abbreviations and symbols used in medicines documentation'* https://www.safetyandquality.gov.au/publications/recommendations-for-terminology-abbreviations-and-symbols-used-in-medicines-documentation/

No.	Item/ step	Yes / No	Action / Comment
24.	Sequence of medication information fields follows the sequence used on the NIMC.		
25.	All spelling is in Australian English.		
26.	All spaces where documentation by clinicians is required are able to accommodate size 14pt font.		
27.	No printed font is smaller than size 8pt.		
28.	No compressed or narrow fonts (including serifs) are used.		
29.	Abbreviations are avoided and only approved abbreviations are used.[4]		
30.	Any acronyms used correspond to only one meaning or subject and are fully written at least once on the chart/form.		
31.	If graphs are used: • all labels and scales specify the unit of measure • the vertical axis of scales and tables are labelled on both the left and right hand sides • information is sequenced to align with the desired clinical process, down the page from most important to least important • where a line indicates a normal level (e.g. temperature = 37°C) this is not a bold line; and, • there is no mixing of vertical and horizontal data plotting.		
32.	Graphed information for different parameters is not overlapping.		
33.	All headings of the same level of importance are formatted the same way (font, font size, upper case).		
34.	When the chart is completed in black ink, the colour shading and documentation can be seen when photocopied.		
35.	Traffic light colours are not used for early warning systems.		
36.	Any keys for codes used on the charts are located closely to the section to which they refer.		
37.	Clinical parameters should be graphed.		
38.	There are no spelling or punctuation errors. Areas of free text are minimal (as they can introduce errors including punctuation and spelling errors). If used, an explanation for their inclusion has been provided to MSEAC.		
39.	Human factors principles have been considered in formatting and design (a description, including the nature		

No.	Item/ step	Yes / No	Action / Comment
	and results of usability testing has been provided to MSEAC).		
40.	Date of publication and date of review are clearly evident on each chart/form.		
41.	A review process has been established to update the chart/form when new evidence-based information becomes available.		
42.	The chart/new form has been thoroughly checked using a multidisciplinary checking process which, at a minimum includes pharmacists, nurses and doctors. A sign-off trail and amendment history which documents who has checked what and when should be provided.		

Table 2: Checklist for Endorsement of Medication-Related Documents such as Protocols/Guidelines that involve the use of medicines

No.	Item/ step	Yes / No	Action / Comment
1.	Review of existing local, state or national protocols/ guidelines† as well as literature has been conducted and the need for the protocol/guideline evaluated. If a protocol/guideline was deemed necessary, the rationale for the protocol/guideline and any differences between the protocol/guideline and existing guidelines (if any) are outlined.		
2.	The core development protocol/guideline group was composed of, at a minimum, a relevant prescriber, pharmacist and nurse. Other relevant clinicians may also be included in the core group. Quality use of medicine principles[6] have been considered in the protocol/guideline's development.		
3.	A broad and inclusive interdisciplinary consultation process has been undertaken, that where possible, achieved consensus with regard to the best clinical management among all clinicians who manage the condition/targeted patients. Documentation outlining the above processes and all feedback has been provided to MSEAC or relevant DTC[7].		
4.	The protocol/guideline has been thoroughly checked using an interdisciplinary checking process which, at a minimum, includes pharmacists, nurses and doctors. A sign-off trail and amendment history which documents who has checked what and when should be provided.		
5.	The protocol/guideline title should clearly describe the protocol/guideline and the purpose of the document is stated clearly at the beginning.		
6.	The protocol/guideline clearly and promptly identifies its purpose and outlines the target population, condition and any subspecialties‡. Considerations regarding relevant		

[6] Commonwealth of Australia. Quality Use of Medicines Principles, The National Strategy for Quality Use of Medicines, 2002, p7.

[7] Any major objections in feedback received must be disclosed to the Medication Safety Expert Advisory Committee or DTC.

†To determine whether certain protocols/guidelines exist, consider contacting NSW TAG or use the Clinical Information Access Portal (CIAP). With respect to developing new guidelines, adapting or adopting existing protocols/guidelines is preferred to the development of new guidelines to promote consistency of practice and support clinicians moving between different healthcare sites.

‡It is recommended that a reference/link to find information for those not targeted is also provided.

	vulnerable populations or cultural aspects of care are provided.		
7.	Pharmacists have conducted an independent double check of all dosing information and ensured that the information is presented in a consistent manner throughout the document. All doses that do not align with standard sources of medication information (e.g. Australian Medicines Handbook (AMH), Therapeutic Guidelines, MIMS, Australian Injectable Drug Handbook (AIDH)) are adequately referenced. Any off-label use of medicines[8] or non-registered medicines are identified and supporting evidence for their inclusion provided.		
8.	Where a protocol/guideline contains medicine ingredient names that are changing, there is a plan for the review and updating of the protocol/guideline during the transition period[9].		
9.	The protocol/guideline complies with NSW Health policies and directives (e.g. Medication Handling in NSW Public Health Facilities PD2013_043).		
10.	The protocol/guideline follows an official standard accommodating hard copy and digital options based on a State Format or template[10].		
11.	Acronyms are avoided but, when used, correspond to only one meaning or subject and must be fully written at least once in the protocol/guideline. Where appropriate, i.e. if several acronyms have been used throughout the document, a glossary is included in the guideline.		
12.	An algorithm/flow-chart is included to aid compliance with the protocol/guideline[§].		
13.	Human factors principles have been considered in formatting and design and a description including the nature and results of usability testing has been provided to MSEAC or relevant DTC).		
14.	No compressed or narrow fonts (including serifs) are used.		

[8] Council of Australian Therapeutic Advisory Groups. 'Rethinking medicines decision making in Australian Hospitals: Guiding Principles for the quality use of off-label medicines.'
[9] Safety Notice 001/16 Changes to Medicine Ingredient Names – April to April 2020: http://www.health.nsw.gov.au/sabs/Documents/2016-sn-001.pdf
[10] NSW Health Policy Directive PD2016_049 *'NSW Health Policy Directives and Other Policy Documents'* http://www0.health.nsw.gov.au/policies/pd/2016/PD2016_049.html
[§] Providing information in tabular format should also be considered when this is the most succinct and clear way to deliver information

15.	All headings of the same level of importance are formatted the same way (font, font size, upper case).		
16.	There are no spelling or punctuation errors.		
17.	Medication information has been presented in a manner that is consistent with ACSQHC recommendations relating to the use of approved abbreviations[11] and the on-screen display of clinical medicines information[12]. For example: • the active ingredient names are used. Where the provision of brand names will provide greater clarity, they should follow the active ingredient name with consistent font styles for each. • adequate space is provided between the medication name and dose (e.g. propranolol 20 mg not propranol20mg) • medication names, doses and units are on one line (not split between lines) • abbreviations should be avoided (or only use those approved) • medicines and directions are free of any error prone terms • there are no trailing zeros • appropriate units and approved abbreviations are used		
18.	Special considerations have been given to the safety aspects of prescribing, dispensing, administering and storing of any high risk medicines, and these are included in the protocol/guideline[13].		
19.	Date of publication and date of review is clearly evident on each protocol/guideline.		
20.	A review process has been established to update the protocol/guideline when new evidence-based information becomes available.		

[11] Australian Commission on Safety and Quality in Health Care (2016) *'Recommendations for terminology, abbreviations and symbols used in medicines documentation'* https://www.safetyandquality.gov.au/publications/recommendations-for-terminology-abbreviations-and-symbols-used-in-medicines-documentation/

[12] Australian Commission on Safety and Quality in Health Care (2016) *'National guidelines for on-screen display of clinical medicines information'* https://www.safetyandquality.gov.au/wp-content/uploads/2016/03/National-guidelines-for-onscreen-display-of-clinical-medicines-information.pdf

[13] NSW Health Policy Directive PD2015_029 *'High-Risk Medicines Management Policy'* http://www1.health.nsw.gov.au/pds/ActivePDSDocuments/PD2015_029.pdf

References

Australian Commission on Safety and Quality in Health Care (2016) '*National Inpatient Medication Chart User Guide'*

Australian Commission on Safety and Quality in Health Care (2016) *'Recommendations for terminology, abbreviations and symbols used in medicines documentation'*

Australian Commission on Safety and Quality in Health Care (2016) *'National guidelines for on-screen display of clinical medicines information'*

CEC DRAFT *'Style Guide and Process for Development of State-wide Observation Charts and Clinical Forms'*

Council of Australian Therapeutic Advisory Groups. *'Rethinking medicines decision making in Australian Hospitals: Guiding Principles for the quality use of off-label medicines.'*

NSW Health Policy Directive PD2012_069 *'Health Care Records – Documentation and Management'*

NSW Health Policy Directive PD2015_029 *'High-Risk Medicines Management Policy'*

NSW Health Policy Directive PD2013_043 *'Medication Handling in NSW Public Health Facilities'*

NSW Health Policy Directive PD2016_049 *'NSW Health Policy Directives and Other Policy Documents'*

NSW Health Policy Directive DRAFT *'Standard Medication Order Sets - Standards for Use'*

NSW Health Policy Directive PD2009_072 *'State Health Forms'*

Standards Australia AS2828.1:2012 *'Australian Standard Health records Part 1: Paper-based health records'*

NSW GOVERNMENT

CLINICAL EXCELLENCE COMMISSION

Clinical Excellence Commission
Locked Bag 8
Haymarket NSW 1240
p. +61 2 9269 5500
e. CEC-SPC@health.nsw.gov.au
w. www.cec.health.nsw.gov.au