

National Medication Chart Review 2020

Presentation with notes and commentary

January 2021





National Medication Chart Review 2020

Patient safety and capability team

Notes:

Slide 1: welcome

Ehara taku toa i te toa takitahi engari, he toa takitini.

My successes are not mine alone, they are ours – the greatest successes we will have are from working together.

And with that thought, tēnā koutou and welcome to this introduction to the revised edition of the national medication chart.

The Commission commenced a utility review of the National Medication Chart (NMC) suite in 2019. The previous review was completed in 2014, with an amendment to the oxygen prescribing section in 2016. Regular review means that the chart design continues to evolve to meet the needs of current practice.

The medication charts are used in inpatient settings to record the medicines prescribed and administered to a patient along with any allergies and adverse reactions from medicines.

The Commission supports a suite of five national medication charts:

- Day Stay Chart
- 8-Day Chart
- 8-Day Chart (scannable)
- 16-Day Chart (long stay)
- 16-Day Chart (long stay scannable).



Slide 2: Why do we have a national medication chart?

The suite of national medications charts (hereinafter referred to as NMC) were introduced to reduce medication errors, and improve patient safety, through the standardisation of paper-based medication charts used in Aotearoa hospitals.

The design of the NMC was the result of an eight-year development phase involving many health professionals. The charts are supported by a user guide and Medication Charting Standard.

The NMCs are extensively used across the sector, in all DHB hospitals, and in some hospices and private hospitals.

The Commission's preference is for electronic prescribing systems.

Notes:



Feedback process

NMC users

- Feedback on the existing chart

NMC committee

- Review of feedback

Feedback to the sector

Notes:

Slide 3: Feedback process

For the review of the NMC, an interdisciplinary committee was established. The purpose of this committee was to undertake a review of the utility of the NMC suite as part of the three-yearly review process. We would like to thank the NMC committee for their active participation in the development of the revised suite of charts.

NMC users were invited to provide feedback on the utility of the existing NMCs. We received 98 responses from both DHB hospitals and non-DHB users. All initial feedback was considered by the NMC committee, and a revised 'NMC_8-Day chart with proposed changes' was drafted and circulated in October 2019 for further feedback. Following further submissions, the recommended and approved changes to the 8-day chart were finalised and the full NMC suite was re-designed to reflect these changes and align with the 8-Day chart.

Implementation was due to begin in late 2019; however, extra time was needed for feedback and consideration, and then the impact of COVID-19, delayed this further. It was also necessary to seek clarification for the oxygen prescribing section and this again affected the timing of implementation. Following consultation with Dr Alex Psirides, Dr Alan Davis, Dr Iwona Stolarek and the wider Committee, this issue has now been resolved.

This presentation provides a summary of the main changes to the 8-day NMC. Where possible, each slide shows an example image and refers to the page or pages of the chart that are affected. For further details please refer to the NMC user guide, which has been updated to reflect the changes to support the implementation phase. This is available on the Commission's website.



ID label panel

First prescriber to write patient's name and NHI: <i>John Brown AAA1234</i>	
Family Name: <i>BROWN</i>	_____
Given Name: <i>JOHN</i>	_____ Gender: <i>M</i>
AFFIX PATIENT LABEL HERE	
Date of Birth: <i>01/01/2001</i>	NHI#: <i>AAA1234</i>

Page 1

- The ID label panels are now enclosed with a border to encourage the correct alignment of the name label without covering other information on the chart.
- The number of required ID labels has been reduced to two (on pages 1 and 2), with one on the IV fluids page (which only needs to be applied if IV fluids / additives are prescribed).

Slide 4: ID label panel

Page 1

- The ID label panels are now enclosed with a border to encourage the correct alignment of the name label without covering other information on the chart.
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Notes:



Special Care Required

Special Care Required	
<input checked="" type="checkbox"/>	Renal impairment
<input type="checkbox"/>	Hepatic impairment
<input type="checkbox"/>	Pregnancy
<input type="checkbox"/>	Breastfeeding
<input type="checkbox"/>	Anticoagulation
<input type="checkbox"/>	Other _____

Page 1

The special care required box has been moved to the top of the front page. This allows the special care alerts to be visible when prescribing, administering or reviewing medicines.

Slide 5: Special Care Required

Page 1

The special care required box has been moved to the top of the front page. This allows the special care alerts to be visible when prescribing, administering or reviewing medicines.

Notes:



Supplementary Charts

Supplementary Medicine Charts	
<input type="checkbox"/>	Insulin
<input checked="" type="checkbox"/>	Specialised analgesia
<input type="checkbox"/>	Heparin
<input type="checkbox"/>	Warfarin
<input type="checkbox"/>	Other _____
<input type="checkbox"/>	Other _____

Page 1

- The supplementary charts box remains on the front page; with the addition of an extra 'Other' checkbox.
- This allows the alerts about supplementary charts being in use to be visible when prescribing, administering or reviewing medicines.

Slide 6: Supplementary Charts

Page 1

- The supplementary charts box remains on the front page; with the addition of an extra 'Other' checkbox.
- This allows the alerts about supplementary charts being in use to be visible when prescribing, administering or reviewing medicines.

Notes:



Medicine Reconciliation

Admission Medicine Reconciliation	
<input checked="" type="checkbox"/> Discrepancies identified Signature <i>SSharples</i> Date <i>01/05/20</i>	
<input checked="" type="checkbox"/> Discrepancies reconciled Signature <i>SSharples</i> Date <i>02/05/20</i>	
<input type="checkbox"/> No discrepancies identified Signature _____ Date _____	

Page 1

- A medicine reconciliation section has been added to the front page. The first two boxes are to identify if discrepancies have been found and when they are reconciled, and the last box is for when no discrepancies are identified. This section should be signed by the person doing the medicine reconciliation and full details added to the sample signatures section.

Slide 7: Medicine Reconciliation

Page 1

A medicine reconciliation section has been added to the front page. The first two boxes are to identify if discrepancies have been found and when they are reconciled, and the last box is for when no discrepancies are identified. This section should be signed by the person doing the medicine reconciliation and full details added to the sample signatures section.

(Feedback during the review included a recommendation to have something on the chart itself to highlight that a medicine reconciliation had been completed.)

Notes:



Sample signatures and initials

Sample signatures – Prescribers

Name & Reg No. <small>(family & given)</small>	Signature	Contact No.
<i>Ira Goodprescriber</i>	<i>I. Goodprescriber</i>	04 911 9111
	<i>Dr Janice Doolittle</i>	04 922 9222

Sample initials – Administrators/Others

Name & Reg No. <small>(family & given)</small>	Initials	Name & Reg No. <small>(family & given)</small>	Initials
<i>Suzie Sharples</i>	<i>SS</i>	<i>Suzie Marke</i>	<i>SM</i>
<i>NZCS 999</i>		<i>12345</i>	
<i>Countless pills</i>	<i>CP</i>	<i>Erica Good</i>	<i>EG</i>
<i>PCNZ 1000</i>		<i>67890</i>	

Page 1

- These sections have been reconfigured to give more lines for administrators' initials.
- For prescribers, the registration number 'Reg No' column has changed to contact number 'Contact No'. Inclusion of the registration number has been added to the 'name' column.
- The signature information can be completed over two lines of the chart; a stamp can be used in this section.

Slide 8: Sample signatures and initials

Page 1

- These sections have been reconfigured to give more lines for administrators' initials.
- For prescribers, the registration number 'Reg No' column has changed to contact number 'Contact No'. Inclusion of the registration number has been added to the 'name' column.
- The signature information can be completed over two lines of the chart; a stamp can be used in this section.

Notes:



Allergies & Adverse Reactions

Allergies & Adverse Reactions			No		
Medication / other	Reaction	New this admission	Medication / other	Reaction	New this admission
<i>Cefuroxime</i>	<i>All over rash</i>	<input checked="" type="checkbox"/>			<input type="checkbox"/>
<i>Morphine</i>	<i>Nausea</i>	<input type="checkbox"/>			<input type="checkbox"/>
		<input type="checkbox"/>			<input type="checkbox"/>
		<input type="checkbox"/>			<input type="checkbox"/>
		<input type="checkbox"/>			<input type="checkbox"/>
Signature <i>A. Goodprescriber</i>		Date <i>1/5/20</i>			

Page 2

- The allergies and adverse reactions boxes have been combined into a single source, on page 2. This placement allows the allergies & adverse reactions to be visible when prescribing, administering or reviewing medicines.
- There is no need to distinguish between an allergy and an adverse reaction on the revised NMC.
- Recording of a clinician's signature assigns accountability for the information and the date shows how current the information is.
- There is also a reminder on the fluids and infusions page (last page) of the NMC to refer to page 2 for information on allergies and adverse reactions.



Notes:

Slide 9: Allergies and Adverse Reactions

Page 2

- The allergies and adverse reactions boxes have been combined into a single source, on page 2. This placement allows the allergies & adverse reactions to be visible when prescribing, administering or reviewing medicines.
- There is no need to distinguish between an allergy and an adverse reaction on the revised NMC.
- Recording of a clinician's signature assigns accountability for the information and the date shows how current the information is.
- There is also a reminder on the fluids and infusions page (last page) of the NMC to refer to page 2 for information on allergies and adverse reactions.



Verbal Orders

Slide 10: Verbal Orders

Page 3

This section has been enlarged to accommodate documentation of three verbal orders.

Verbal Orders (must be signed as soon as possible or within 24 hours of order)

Date & Time 1/5/20 20	Medicine O, N, D, A, N, S, E, T, R, O, N,							Given by Checked by
	Dose 4	Units mg	Route PO	Dose calculation (eg. mg/kg per dose)	Date & time of dose STAT 1/5/2020	Initials SM	Time completed 1000	
			Prescriber's name I Goodprescriber	Prescriber's signature I. Goodprescriber	Initials EG	Time completed 1005		
	Pharmacy & special instructions		Pharm					

Page 3

This section has been enlarged to accommodate documentation of three verbal orders.



Notes:



Oxygen Therapy & Medical Gases

Oxygen Therapy

Remember: to document oxygen administration on the patient's Vital Signs chart (L/minute)

Target oxygen saturation (%): 88-91% COPD/chronic respiratory failure 92-96% most acute conditions Other _____

Start date	Device/delivery	Flow rate range / FIO ₂	Signature	Stop date

Page 3

- The 'Target Saturations' box has been moved to the bottom of page 3 and shaded pink to make it more obvious (and to keep the 'Once Only' medicines together).
- The parameters have been updated to 88-91% and 92-96% and wording has been added for guidance.

Slide 11: Oxygen Therapy & Medical Gases

Page 3

- The 'Target Saturations' box has been moved to the bottom of page 3 and shaded pink to make it more obvious (and to keep the 'Once Only' medicines together).
- The parameters have been updated to 88-91% and 92-96% and wording has been added for guidance and we have referenced the guidelines from the Thoracic society in the user guide.¹

Notes:

¹ https://www.thoracic.org.au/journal-publishing/command/download_file/id/34/filename/TSANZ-AcuteOxygen-Guidelines-2016-web.pdf



The dose boxes

Verbal Orders (must be signed as soon as possible or within 24 hours of order)

Date & Time 1/5/20	Medicine D, N, D, A, N, S, E, T, R, O, N,	Units	Route PO	Dose calculation (eg. mg/kg per dose)	Date & time of dose STAT 1/5/2020	Initials SM	Time commenced 1000	Given by
	Dose 4	mg				Initials EG	Time completed 1005	Checked by
			Prescriber's name I Goodprescriber	Prescriber's signature I. Goodprescriber	Pharmacy & special instructions	Pharm		

As Required (PRN) Medicines

Date 2/5/20	Medicine P, A, R, A, C, E, T, A, M, O, L	Units	Route PO	Frequency Q4H	Dose calculation (eg. mg/kg per dose)	Max dose/24hrs 4g	Prescriber's signature I. Goodprescriber
	Dose 1	g					
	Dose range if needed		Indication PAIN	Pharmacy & special instructions	Pharm	Sign, date and time to cancel	

The wording 'Dose range if needed' has been removed from the 'Dose' box in all sections except in the 'As Required (PRN) Medicine' sections on pages 4 to 7.

Slide 12: The dose boxes

The wording 'Dose range if needed' has been removed from the 'Dose' box in all sections except for the 'As Required (PRN) Medicine' sections on pages 4 to 7.

(The previous inclusion of that instruction encouraged some prescribers to add a dose range when a single dose should have been specified.)

Notes:



As Required (PRN) Medicines

As Required (PRN) Medicines

Date	Medicine						
2/5/20	P A R A C E T A M O L						
	Dose	Units	Route	Frequency	Dose calculation (eg. mg/kg per dose)	Max dose/24hrs	Prescriber's signature
	1	g	PO	Q4H		4g	A. Goodprescriber
	Dose range if needed		Indication	Pharmacy & special instructions		Pharm	Sign, date and time to cancel
			PAIN				

Pages 4 to 7

- An extra page has been added, giving additional space for PRN medicines.
- PRN 'Indication' and 'Max dose/24hrs' fields have been bolded to provide emphasis.

Slide 13: As Required (PRN) Medicines

Pages 4 to 7

- An extra page has been added, giving space for additional PRN medicines.
- PRN 'Indication' and 'Max dose/24hrs' fields have been bolded to provide emphasis.

Notes:



Recommended Administration Times

Recommended Administration Times					
Guidelines only					
Morning	Mane	0800			
Night	Nocte			1800 or 2000	
Twice a day	BD	0800		2000	
Three times a day	TDS	0800	1400	2000	
Four times a day	QID	0600	1200	1800	2200
Strict 8 hourly	Q8H	0600	1400	2200	
Strict 6 hourly	Q6H	0600	1200	1800	2400

Page 15

The 'Recommended Administration Times' box is now on the top of page 15.

Slide 14: Recommended Administration Times

Page 15

The 'Recommended Administration Times' box is now on the top of page 15.

Notes:



Non-administration Codes

Non-administration Codes	
CP	Carer/parent administered
D	Prescriber's instructions
N	Not administered - document reason in notes
R	Patient refused
RV	Review
SM	Self-medicating
U	Patient unavailable
W	Withheld

Page 15

New codes have been added 'W' for 'withheld' , 'RV' for 'review', 'U' for 'patient unavailable'.

Slide 15: Non-administration Codes

Page 15

New codes have been added:

- 'W' for 'withheld'
- 'RV' for 'review'
- 'U' for 'patient unavailable'.

Notes:



Intravenous fluid prescription

Allergies & Adverse Reactions
Refer to page 2 for details

Fluid and infusion prescription

Fluid chart number of

Note: The fluid balance chart must also be completed

Family Name: Bauer
 Given Name: John Gender: M
 AFFIX PATIENT LABEL HERE
 Date of Birth: 01/01/2001 NHIF: AAA1234

Date	Prescribed start time	Volume (mL)	Fluid and additives	Route	Rate (mL/hour)	Prescriber's signature	Time commenced	Time completed	Commenced by	Checked by
02/05/20	1415	1000	Sodium Chloride 0.9%, Potassium Chloride 20 mmol/L	IV	100	<i>A. Goodprescriber</i>	1415	0015	SM	EQ
03/05/20	0015	1000	Sodium Chloride 0.9%	IV	100	<i>A. Goodprescriber</i>	0015	1015	SM	EQ

Page 16

- The 'Intravenous and subcutaneous fluid prescription and infusion record' section has been reconfigured.
- The 'Completion/Time/Actual Vol' columns have been removed, and a reminder to complete a fluid balance chart added.
- A continuation sheet for intravenous fluid prescription and infusion records will be available.

Slide 17: Intravenous fluid prescription

Page 16

- The 'Intravenous and subcutaneous fluid prescription and infusion record' section has been reconfigured.
- The 'Completion/Time/Actual Vol' columns have been removed, and a reminder to complete a fluid balance chart added.
- A continuation sheet for intravenous fluid prescription and infusion records will be available.

Notes:



Subcutaneous Charting Sticker

Date	Medicine	Dose	Units	Diluent & volume (as per policy)	Prescriber's signature
4/20	MORPHINE	60	mg	Sterile water for injection	A. Goodprescriber
6/20	MILTAZODOLAM	20	mg		
				Duration	Pharm
				24 hours	Sign, date & time to cancel

- A subcutaneous charting sticker has been introduced for optional use. Subcutaneous medication can now be prescribed in the regular section of the NMC using a sticker template. This is to be placed across two regular medicines rows for multiple medicines. The sticker has rows for up to four medicines to be prescribed in a single syringe.
- The continuous subcutaneous infusion prescription sticker can also be placed on the fluid and infusion prescription page (last page of the chart) if that is preferred (see your local policy for guidance).

Slide 18: Subcutaneous Charting Sticker

- A subcutaneous charting sticker has been introduced for optional use. Subcutaneous medication can now be prescribed in the regular section of the NMC using a sticker template. This is to be placed across two regular medicines rows for multiple medicines. The sticker has rows for up to four medicines to be prescribed in a single syringe.
- The continuous subcutaneous infusion prescription sticker can also be placed on the fluid and infusion prescription page (last page of the chart) if that is preferred (see your local policy for guidance).

Notes:

Removal

The Venous Thromboembolism (VTE) prevention section has been removed.

Rationale:

- the NMC is not the appropriate place to document a clinical assessment
- different specialties have different VTE prophylaxis protocols
- alternative assessment tools are in place (eg, the pre-surgical check list)
- the section is not relevant for all specialties eg, neonates, paediatrics, mental health.

Slide 19: Removal

The Venous Thromboembolism prevention section has been removed.

The rationale for this is:

- the NMC is not the appropriate place to document a clinical assessment
- different specialties have different VTE prophylaxis protocols
- alternative assessment tools are in place (eg, the pre-surgical checklist)
- the section is not relevant for all specialties (eg, neonates, paediatrics, mental health).

Notes:



Thank you

Slide 20: Thank you

Kia ora! Thank you for listening to and viewing this presentation.

The NMC suite is supported by the user guide and the Medication Charting Standard, both of which are available on our website. A PDF version of these slides and commentary is also available on our website.

Kia whakairia te tapu
Kia wātea ai te ara
Kia turuki whakataha ai
Kia turuki whakataha ai
Haumi e. Hui e. Tāiki e!

Restrictions are moved aside so the pathway is clear to return to everyday activities, enriched and unified.

Notes: