safety IN PRACTICE

General Practice Medicines Reconciliation 2020-21

Every patient, every time

AUCKLAND DISTRICT HEALTH BOARD Te Toka Tumai

Waitematā District Health Board

Best Care for Everyone

ALLIANCE HEALTH+ Inspiring Health Transformation

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comprehensive care

National Hauora Coalition

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Contents

1.1 Background

A key aim of Safety in Practice is to reduce the harm experienced from medication use. Adverse drug events (ADEs) are major causes of patient morbidity and mortality and a source of significant cost for both patients and organisations.[1,2] Preventing these remains a top patient safety priority, not only in hospitals but also across the continuum of care for patients.[3]
International studies show:

- Between 10 and 67% of medication histories have at least one error[4]
- Up to one-third of medication errors have the potential to cause patient harm[5]
- More than 50% of medication errors occur at transfers of care[6]
- Patients with one or more medicines missing from their discharge information are 2.3 times more likely to be readmitted to hospital than those with correct information on discharge[7]
- 85% of discrepancies in medication treatment originate from poor medication history taking.[8]

Medicines reconciliation is defined as **the process to collect, compare, and communicate the most accurate list of medicines that a patient is taking, together with details of any allergies and adverse drug reactions (ADRs). This has the goal of providing the correct medicines for a given time period at all transition points[1].**

Many organisations have demonstrated that implementing medication reconciliation at all transitions of care is an effective strategy for preventing ADE.[7] 'Implementing Medicines New Zealand 2015-2020' emphasises that healthcare providers will need to work together to ensure medicine reconciliation happens consistently at each transition and involves the patient.[9] Safety in Practice is working to facilitate improved communication in this area through combining the learning and sharing experiences of both General Practices and Pharmacies in 2019/20. Both have modules looking at different aspects of the medication reconciliation process.

1.2 Aim

All discharge summaries received will be reviewed, with medicines reconciled AND actions completed, within seven calendar days of being received, by June 2021.

1.3 Equity

Reducing inequalities in outcomes between Maori and other high needs groups compared to the general population is a priority at all levels of the health system, including Auckland and Waitemata DHB's.[10] Although overall rate of amenable mortality* in NZ is declining, disparities between ethnicities remain, with Maori having rates 2.7 times higher and Pacific people rates 2.4 times higher than non-Maori, non-Pacific population[11]. Long term conditions like diabetes, cancers, cardiovascular disease, respiratory disease, chronic kidney disease, musculoskeletal and other conditions have the most significant impact on this, accounting for 88% of health loss.[11] Patients with these conditions are more likely to be prescribed a greater number of medications, with associated risks of medication interactions and ADEs. They are also more likely to be admitted to hospital with the associated risks of medication changes and ADEs at these transition points of care, particularly discharge back to the community.

It is well recognised that for patients who already experience poorer health outcomes, the very reasons that contribute to this could make them more at risk of errors, oversights, miscommunications and receiving care that is less able to meet their needs. Working on processes to improve patient safety overall would be expected to have particular benefit for reducing risk for these groups, which would contribute to reducing inequity.

In the audit practices will report the ethnicity of each patient. Practices can focus their work to look at specific higher risk groups using an equity lens.

Some examples might be:

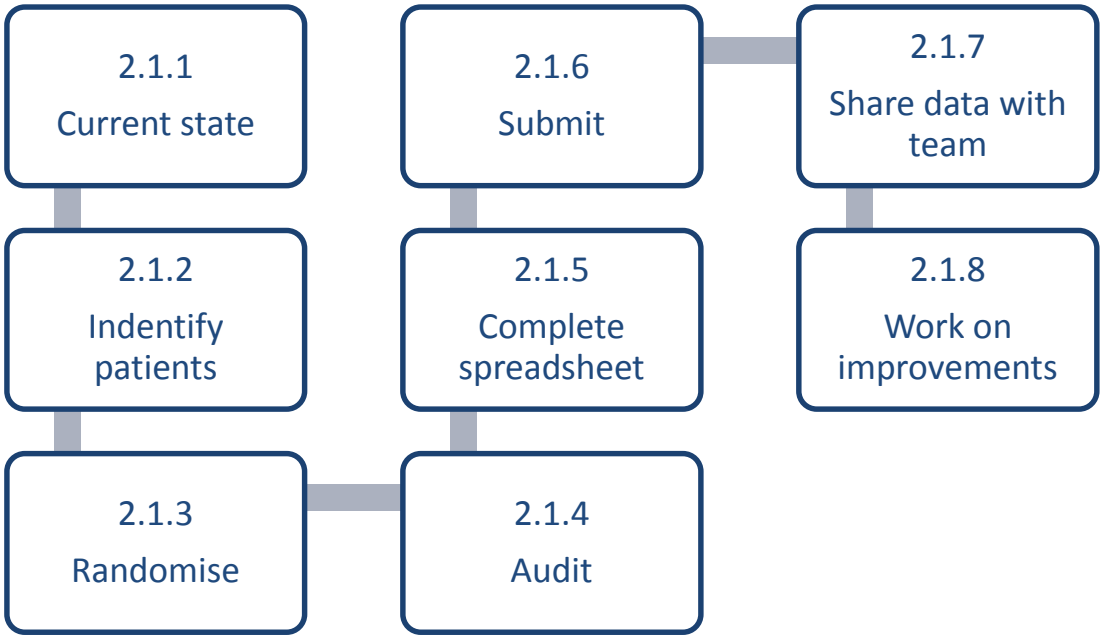
- Focusing specifically on high-risk populations by selecting discharge summaries only for a particular group and then selecting 10 of these patients randomly. SIP reports provided by Mohio present Māori patients first followed by Pacific then other. Dr Info allows either selection by Maori, or by high needs.
- Practices who have 10 or more Maori patients with a discharge summary in the previous month should strongly consider only focusing on these patients in their audit.
- Specifically seeking input from patients from these groups on their experience of the practice's Medication Reconciliation systems, and how they might be improved from the patient interaction point of view.

* Amenable mortality is defined as premature deaths (deaths under age 75) that could potentially be avoided, given effective and timely healthcare. That is, early deaths from causes (diseases or injuries) for which effective health care interventions exist and are accessible to New Zealanders in need. *https://nsfl.health.govt.nz/.../**defining_amenable_mortality**_sept2016.docx* · DOC file · Web view

1.4 Measures & rationale

Measure 1: Has medicines reconciliation occurred within seven CALENDAR days of the Electronic Discharge Summary (EDS) being received by the practice?
Rationale • Transition points in care are recognised as being a focus of risk when medications may have been altered. • Reconciling any changes in medications has been shown to reduce the rates of ADE and patient harm.
Sources Institute of Health Improvement. 2017. *Medication reconciliation to prevent adverse drug events*. Available at: http://www.ihi.org/Topics?ADEsMedicationReconciliation/Pages/default.aspx
Measure 2: Has the patient's regular medication list been updated within seven CALENDAR days of the EDS being received by the practice?
Rationale • The first prescription from General Practice following a discharge from hospital is associated with a higher rate of errors and potential harm. It is therefore important that medication changes are recorded in a clear way as soon as possible after discharge. Errors that can otherwise occur include previous medications which should have been stopped being continued, incorrect doses being inadvertently prescribed and medications that have been started in hospital not being continued. • Patients with one or more medicines missing from their discharge information are 2.3 times more likely to be readmitted to hospital than those with correct information on discharge.
Sources Stowasser DA, Stowasser M, Collins DM. 2002. A randomised controlled trial of medication liaison services - acceptance and use by health professionals. Journal of Pharmacy Practice and Research 32: 133-40.
Measure 3: Is it documented that any changes in their regular medications have been communicated to the patient or their representative within seven CALENDAR days of the EDS being received by the practice?
Rationale • Patients do not always understand and remember instructions and information when they are or have been in hospital – a time when they are usually at their most unwell. • Ensuring implementation and understanding of medication changes is a crucial part of the medication reconciliation process. • Complicating factors such as having blister packs and supplies of medication in the home may result in changes not being implemented by patients in the way that might appear on the discharge summary.
Sources As above

2.1 Collect your baseline data



2.1.1 Current state

To assess your processes you will collect data from 10 *random* patients every month. As a team, you will then reflect on your results, look for opportunities for improvement and use PDSA cycles (Plan, Do, Study, Act)
Your first set of data (baseline data) is relating to the month of August and is due on September 10th.
Note: we expect low scores for the baseline, or 'Current State' August data.

2.1.2 Identify patients

On the day of the data collection each month, run the query related to your module, available to download from http://www.safetyinpractice.co.nz in the Resources section.
Refer to "Finding your patients" document on website.

2.1.3 Randomise

From the list generated in step 2.1.1 it is essential to **RANDOMLY SELECT** your sample of 10 patients to audit. An online random number generator can be used. Note Safety in Practice does not endorse advertising associated with such tools.

2.1.4 Audit

Review each of your 10 selected records against the following criteria. You can use the Paper Form provided on the resources section of our website to keep track or simply enter records directly onto the audit spread sheet.

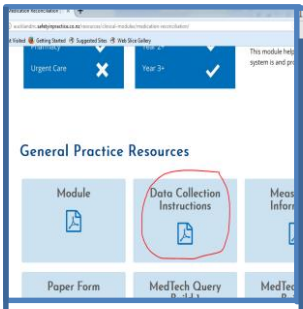
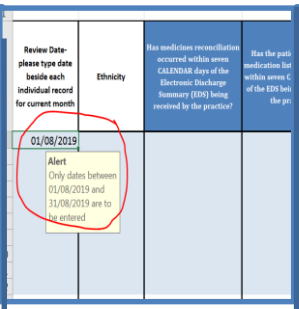
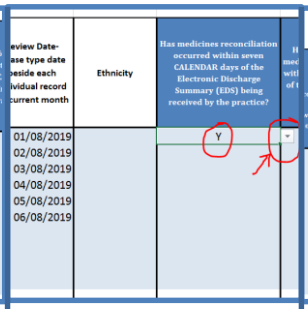
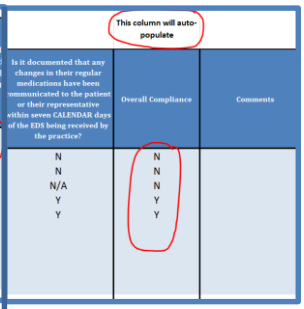
2.1.4.1 Measures & guidance

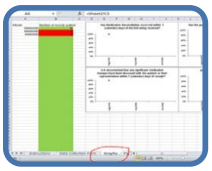
Measure 1: Has medication reconciliation (as defined below) occurred within seven CALENDAR days of the EDS being received by the practice?
Guidance Medicines reconciliation is defined as*:* *"the processes to collect, compare, and communicate the most accurate list of medicines that a patient is taking, together with details of any allergies and adverse drug reactions (ADRs). This has the goal of providing the correct medicines for a given time period at all transition points"*[1] Select YES if medicines reconciliation has occurred within seven calendar days of the EDS being received by the practice. Select NO if medication reconciliation has not occurred within seven calendar days of the EDS being received by the practice. Medicines reconciliation should be recorded as having been done, even if there are no changes to their regular medications or allergies.
Measure 2: Has the patient's regular medication list been updated?
Guidance Select YES for all discharges with changes required that were documented in the patient's clinical record within seven calendar days of the EDS being received by the practice. Select NO for all discharges with changes required that were NOT documented in the patient's clinical record within seven calendar days of the EDS being received by the practice. Select N/A for all discharges where there are no changes to the patient's regular medications.
Measure 3: Is it documented that any changes in their regular medications have been communicated to the patient or their representative within seven CALENDAR days of the EDS being received by the practice?
Guidance Using the PMS, identify if it is documented that any significant changes to the medications were communicated to the patient or their representative. Select YES for all discharges with changes where it is documented that these have been communicated to the patient or their representative documented. Select NO for all discharges with changes where it is NOT documented and/or these have NOT been communicated to the patient or their representative Select N/A for all discharges that have no changes to the patient's regular medications.

2.1.5 Complete the spreadsheet

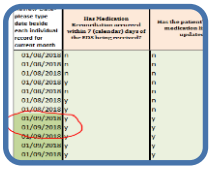
Tip: Your first set of data (baseline data) is relating to the month of August so this is due on September 10th.

Please note: we expect low scores for the baseline August 2020 data, prior to the Safety in Practice programme beginning

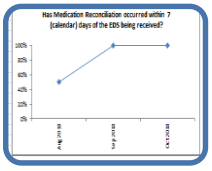
			
Download the spread sheet for your module in the Resources section of www.safetyinpractice.co.nz	Record the month **the data relates** to in a DD/MM/YY format in the left column (Alert boxes in yellow will guide you). For your first data set collected in September this is 1/8/20	Mark Y, N or N/A by clicking on the dropdown menu, against for each measure and each patient according to your findings in the previous section.	The final measure "Overall compliance" will auto-populate.



Graphs will be automatically generated in the next tab in the spread sheet.



Next month add your data to the same spread sheet.



This means you can track your progress over time.

2.1.6 Submit

Submit your data on the 10th of each month to audit@safetyinpractice.co.nz and your PHO facilitator.

> Tip: Please ensure all data sent to Safety in Practice in anonymised

2.1.7 Share data with your team

Safety in Practice works when all team members take part. Make the data available for everyone to see. Print the graphs and put them up in the tea room so the whole team can see the progress being made and have the opportunity to make suggestions on how to improve.

2.1.8 Work on improvements

As a team, look for opportunities for improvement and use PDSA cycles (Plan, Do, Study, Act). Refer to the Quality Improvement Workbook for other quality improvement tools.

2.2 Change idea examples

The following ideas have been tested and implemented in previous SiP teams:

General	• Patient satisfaction survey • Communicate with each other and reinforce best practice protocols
Clinical processes	• Provide protected clinician time for discharge summary reviews • Up-skilling of nurses to do medicines reconciliation • Provide protected administration time for nurses to do medicines reconciliation follow-up • Triaging of discharge summaries for who most appropriate person to do the medicines reconciliation • Filter discharge summaries and reconcile medicines immediately • Audit medicines reconciliation at monthly clinical/practice meetings • Orientate locums and ask them to check INBOX and explain process to them • Include using Testsafe to reconcile medicines
Recording in PMS	• Set up and use Medtech "Medication Status" categories to identify when new medications started, doses have been altered or medicines have been stopped (see Resources section). This function automatically records that change made in daily record and prints change onto script if printed that day ○ Alternatively some practices prefer to use READ codes to identify when medication reconciliation has taken place. For example: #8B316 - Medication Changed

	○ #8B3A1 - Medication Increased ○ #8B3A2 -Medication Decreased ○ #8B313 - Medication Commenced ○ #8B3A3 - New Medication Commenced ○ #8B3R - Drug Therapy Discontinued ○ #8B396 - Treatment Stopped – alternative therapy undertaken • Ensure long term medicines are kept up-to-date • Agree as a team on method of recording changes and include in practice manual and medicines reconciliation policy
Discussion of changes with patient	• Clinician doing the reconciliation decides the most appropriate method of going over the changes with the patient (or their representative) e.g. phone the patient, get them to come in to see nurse and go over changes, get them to make doctor's appointment for review, utilise pharmacists if available to assist with this process. • Utilise other staff members to contact the patient and set up the reviews • Send 'low risk' patients a letter or text confirming changes.
Liaising with community pharmacy	• Pharmacy to contact GP clinic when they get changes to patient's medicines from a different prescriber • Consider yellow medication card, or blister packing for patient • Invite pharmacist or representative to attend practice meetings on regular basis • Discuss with commonly used pharmacies on the most effective communication processes for queries e.g. text or email sent to specific person in practice to liaise as required about queries • Train staff in and set up emails or systems to use ISBAR tool for structuring communication • Consider extra services that pharmacy may be able to provide e.g. MUR medicines use review or MTA medicine therapy assessment (not necessarily funded)

2.3 Previous teams' experiences

Benefits	Challenges
• Reduced phone calls from pharmacy • Confidence within the team that patient's medications are up to date • Less complicated follow-up consultations if work is done upfront • Nurses feel more confident when patient's call through • Patients feedback is positive • Improved concordance of medicines and records • Good staff buy in to process. • Admin staff find delegating discharge summaries easier • Using medicines reconciliation status for daily prescribing • Imrpoved relationship and more efficient communication with pharmacy	• Time commitment required – no easier way out • Perception of cost to practices for extra clinician time (although sorting medicines out does need to be done at some point anyway) • Cost to patients if they need to come in for follow up • Some discharge summaries lack clarity. • Varying prescribing and discharging clinician styles • Delay in getting summary from hospital. • Frequent reinforcement needed to effect change • Identification of near misses • Took time to effect change • Defining what is a clinically significant drug change

3.1 Connections to other parts of Safety in Practice programme

Pharmacy

Medicines Reconciliation Module

Pharmacies also have a specific module that looks at their processes of medicines reconciliation.

Aim: Patients with non-GP generated prescriptions will have medicines reconciled and follow-up actions completed at time of dispensing

Process measures

- Prescription reconciled with 2 valid sources
- ADR and allergy status checked
- Unexplained discrepancies clarified with the prescriber
- Patient educated about changes, given the opportunity to ask questions and offered an up-to-date list of medicines

Outcome measures – with next GP script

- Next GP script checked with up-to-date medicines list
- Any discrepancies clarified with the GP and documented

If you work with a pharmacy in your area that might be interested, feel free to direct them to the website or to contact us at info@safetyinpractice.co.nz

3.2 MOPs & Cornerstone

The Medicines Reconciliation Audit is endorsed by the RNZCGP for Maintenance of Professional Standards (MOPS).

The audits and PDSA cycles found on the Resources section of our website can be used for Cornerstone as a Quality Improvement Activity.

3.3 Glossary

ADE	Adverse Drug Event
Bundle	A structured way of improving the processes around patient care: a small, straightforward set of evidence-based practices, generally three to five, that, when performed collectively and reliably, have been proven to improve outcomes.
CARM	Centre for Adverse Reaction Monitoring New Zealand
Change package	A collection of change ideas known to produce a desired outcome in a process or system.
Dr Info	A clinical information platform used by general practices. Data is extracted and analysed from practices PMS'.
EDS	Electronic Discharge Summary
IHI	Institute of Health Improvement
HQSC	Health Quality & Safety Commission of New Zealand
Medicines Reconciliation	The process of collecting, comparing, and communicating the 'most accurate' list of medicines that a patient is taking, together with details of any allergies and/or adverse drug reactions (ADRs), with the outcome of providing correct medicines for a given time period
Module	Each of the areas identified as presenting the highest risk to patients within the community have been developed into modules. Each module is structured to include a change package and a bundle
Mohio	A clinical information platform used by general practices. Data is extracted and analysed from practices PMS'.
OTC	Over the counter
PMS	Patient management system e.g. MedTech, MyPractice, ToniQ
PHO	Primary health Organisation e.g Auckland PHO, Alliance Health Plus, Comprehensive Care, East Health Trust, Total Healthcare, National Hauora Coalition, Procare
RNZCGP	Royal New Zealand College of General Practitioners
WDHB	Waitemata District Health Board
SIP	Safety in Practice

3.4 References

1. Health Quality & Safety Commission, 2010. Medicine Reconciliation Standards, Version 3. Wellington: Health Quality & Safety Commission. Avaialble at: www.hqsc.govt.nz/assets/Medication-Safety/Med-Rec-PR/Medication_Rec_Standard_v3.pdf

2. Ministry of Health, 2015. Implementing Medicines New Zealand 2015-2020. Wellington: Ministry of Health. ISBN-978-0-478-44826-9. Available at: https://www.psnz.org.nz/Folder?Action=View%20File&Folder_id=86&File=ImplementingMedicinesNZ2015to2020June2015.pdf

3. Institute of Health Improvement, 2017. Medication reconciliation to prevent adverse drug events. Available at: http://www.ihi.org/Topics?ADEsMedicationReconciliation/Pages/default.aspx

4. Tam VC, Knowles SR, Cornish PL, et al. 2005. Frequency, type and clinical importance of medication history errors at admission to hospital: a systematic review. Canadian Medical Association Journal 173(5): 510-5.

5. Cornish PL, Knowles SR, Marchesano R, et al. 2005. Archives of Internal Medicine 165: 424 -9.

6. Sullivan C, Gleason KM, Rooney D, et al. 2005. Medication reconciliation in the acute care setting: opportunity and challenge for nursing. Journal of Nursing Care Quality 20: 95-98.

7. Stowasser DA, Stowasser M, Collins DM. 2002. A randomised controlled trial of medication liaison services - acceptance and use by health professionals. Journal of Pharmacy Practice and Research 32: 133-40.

8. Gleason KM, McDaniel MR, Feinglass J, et al. 2010. Results of the Medications At Transitions and Clinical Handoffs (MATCH) study: an analysis of medication reconciliation errors and risk factors at hospital admission. Journal of General Internal Medicine 25(5):441-447.

9. Institute of Health Improvement. 2017. Medication reconciliation to prevent adverse drug events. Available at: http://www.ihi.org/Topics?ADEsMedicationReconciliation/Pages/default.aspx

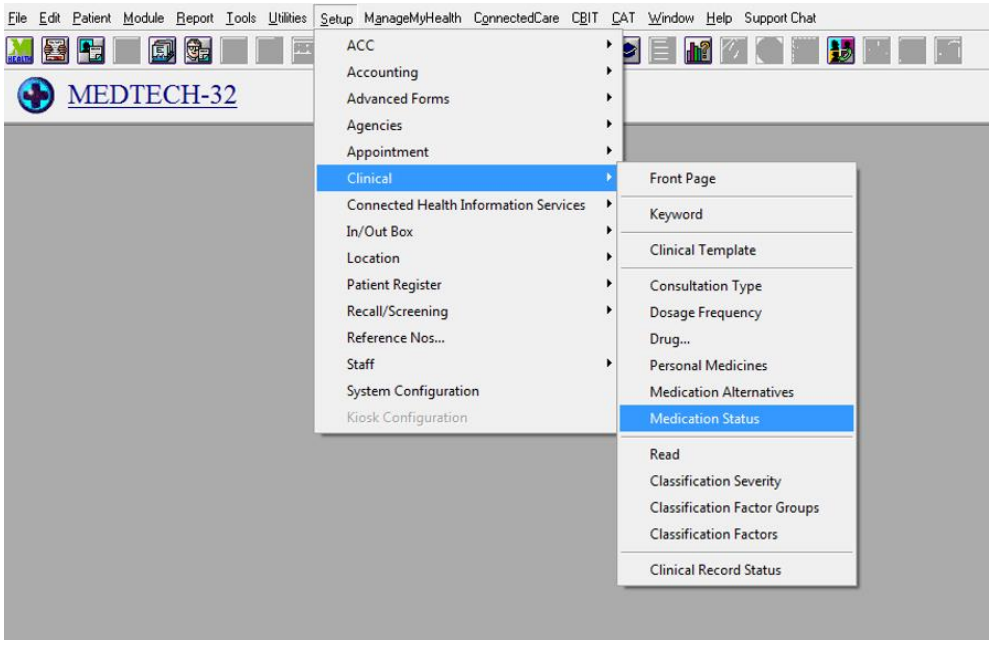
10. Waitemata and Auckland District Health Boards, 2017. 2017/18 Annual Plan. Available at: http://www.waitematadhb.govt.nz/dhb-planning/organisation-wide-planning/annual-plan/

11. Ministry of Health, 2016. Health and Independence Report. Available at: https://www.health.govt.nz/publication/health-and-independence-report-2016

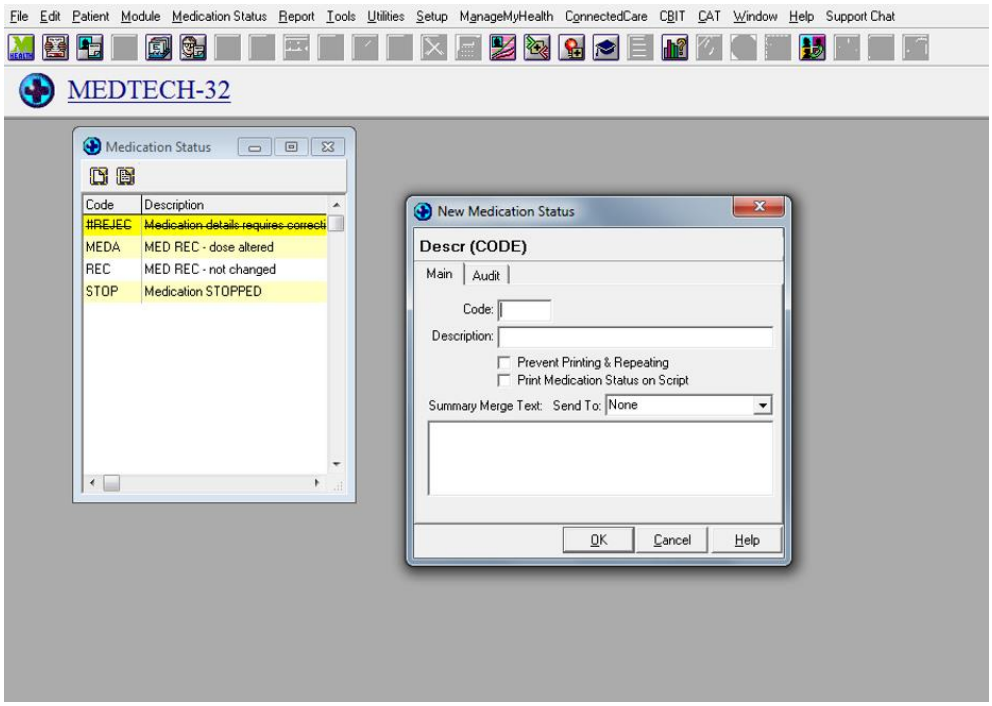
Appendix 1

Instructions for setting up Medication Status categories in Medtech 32

- Setup – Clinical – Medication Status

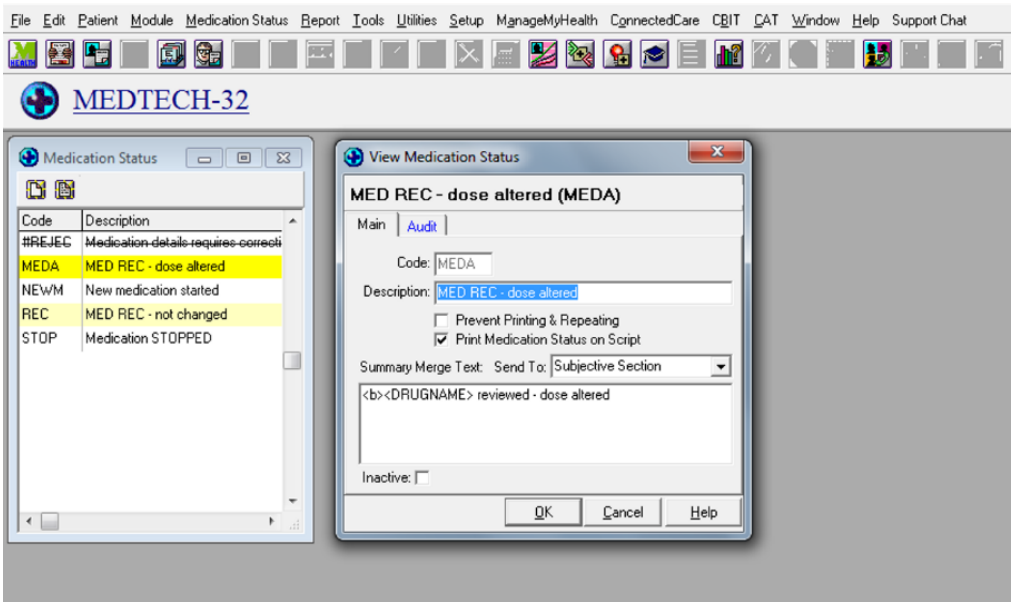


- Add new medication status click on top L hand corner



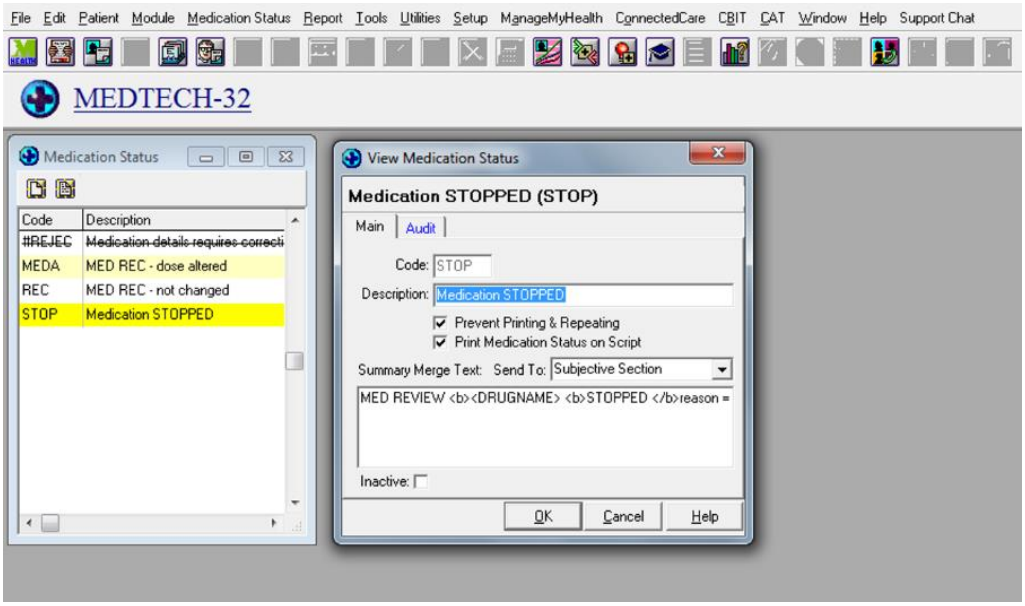
Options:

- Medications reconciled dose altered



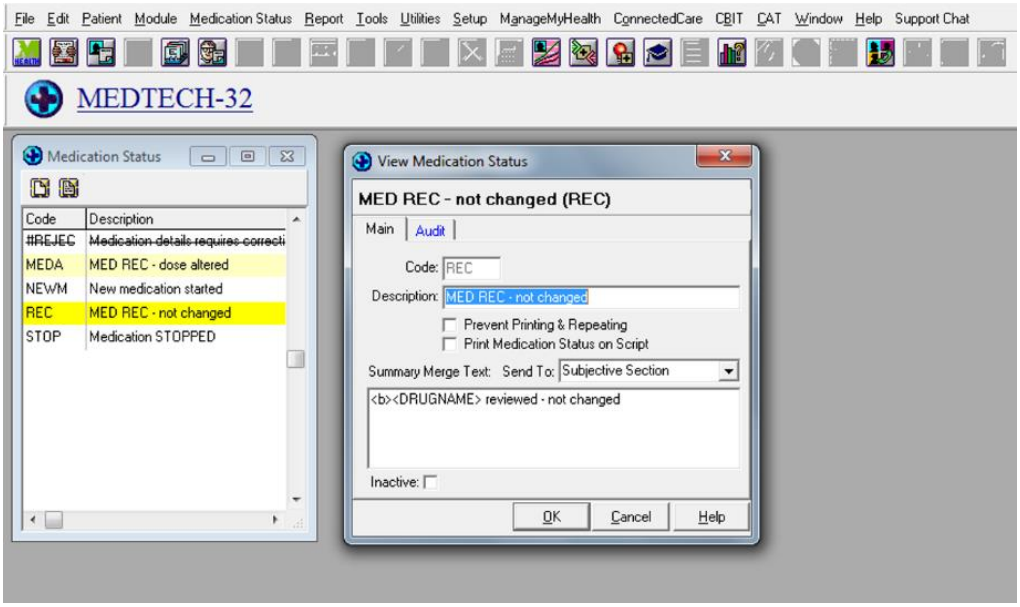
Ticking the box Print Medication Status on script means that when this medication is printed that day it will also have a note on the actual prescription – which can be useful for the pharmacy to know.

- Medications STOPPED



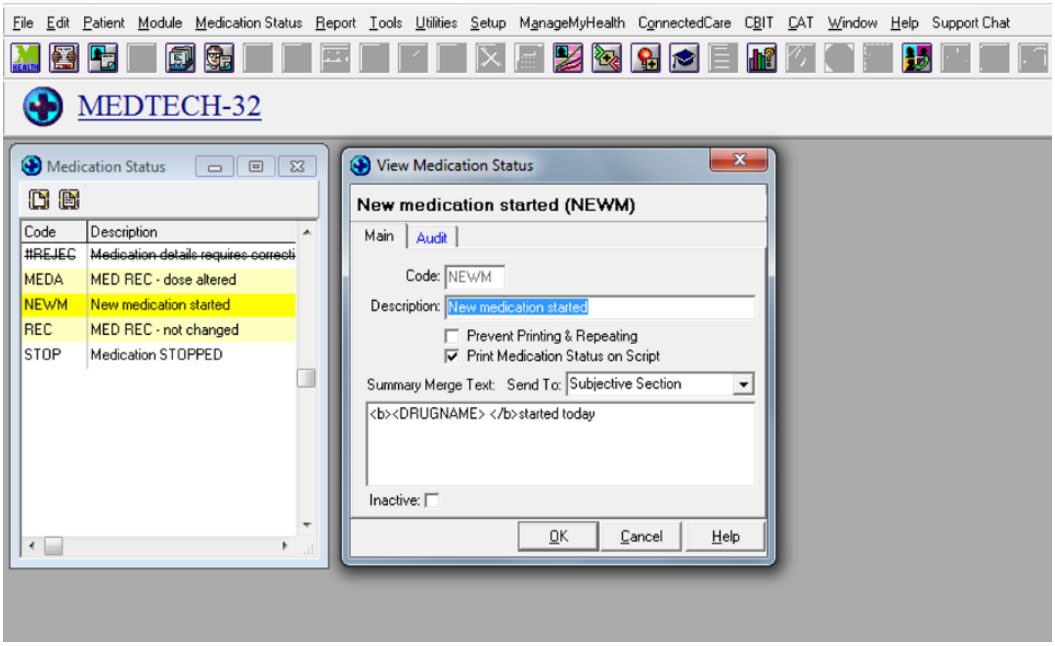
When a medication is stopped it is useful to tick the box “prevent Printing and Repeating”. If this is ticked, then that medication will not be able to be printed again. If it is re-started it will need to be re-prescribed. This helps to avoid inadvertently repeating a medication which has been stopped. This example also provides space for identifying in the notes (see below) the reason that a medicine was stopped.

- Medicines reconciled not changed



This selection might be used if there are only a couple of individual medicines. If a number of medications have been reconciled but none have changed then an alternative option would be to create a Key Word which can indicate in the daily record that medications have all been reconciled that day.

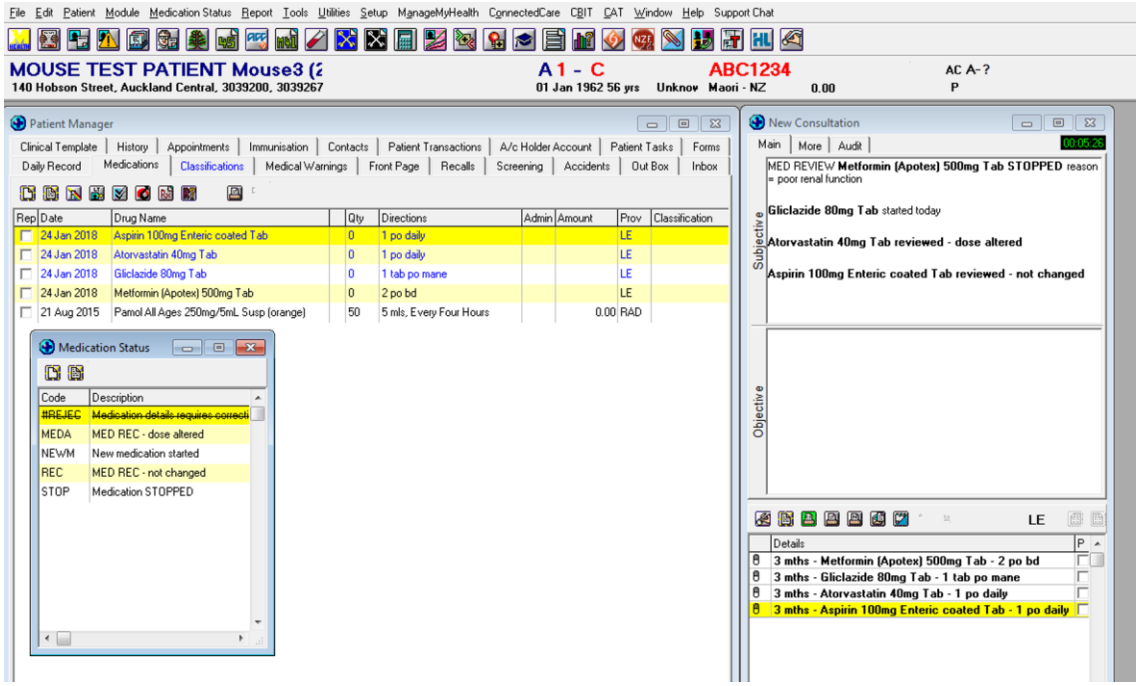
- New medication started



Notes:

- In any of the above, optional text can be added automatically to the daily record by writing in the Summary Merge Text section and selecting the part of the notes (Subjective or Objective) that this will be recorded.
- Hovering over the free text area then R clicking allows insertion of the <DRUGNAME> option which automatically merges the drug that has been selected. The codes that sit BEFORE the text e.g. <b> identifies the subsequent text to be in this case written in **bold.** Other options can be selected from the options that show when you hover over it.

- The example outlined for medication STOPPED here has allowed space for writing in the reason for this
- Here is an example of how this might look when each option is automatically printed into the subjective section of the notes



NB these are just examples and there are lots of options that you can create for your practice situation!